

# CYBOTIC

PRESENTS

# ICONIC

2024-25



MANGALORE INSTITUTE OF TECHNOLOGY & ENGINEERING

DEPARTMENT OF CSE

(IoT & Cyber Security with Blockchain Technology)









# VISION

Envision becoming a premier department in providing high-quality technical education in IoT, Cyber security, and Blockchain technologies to students, enabling them with industry-relevant skills, critical thinking, and a hands-on approach to tackle real-world challenges in socially responsible and sustainable ways and engage in quality research.

# MISSION

- To deliver a comprehensive and quality education that equips students with the skills and knowledge needed to excel in IoT, Cybersecurity, and Blockchain.
- To provide a conducive and pleasant learning ecosystem that promotes research and Innovation activities among the staff and students.
- To collaborate with industry, government, and the community to address real-world challenges and contribute to the betterment of society.
- Inculcate teamwork, strong ethical values, and lifelong learning skills among students with a sense of societal responsibilities

## Program Educational Objectives (PEOs)

- Provide innovative solutions, communicate effectively using modern tools, and work productively & ethically in multidisciplinary teams by embracing global challenges with leadership skills.
- Design and integrate hardware and software systems through cutting-edge technologies and open-source platforms in IoT, Cyber Security, and Blockchain technologies to provide reliable techno-commercially feasible software solutions for societal and industrial problems.
- Achieve excellence in the IT profession by becoming leaders, researchers, entrepreneurs, and catalysts for social change through a high-quality education grounded in mathematics, engineering, and fundamental science principles.

## Program Specific Outcomes (PSOs)

- Identify cybersecurity vulnerabilities and threats and develop strategies to mitigate these risks, with a focus on Blockchain technologies.
- Develop, integrate and optimize IoT solutions across diverse domains, enhancing the efficiency and reliability of interconnected devices and systems.





## CYBOTIC STUDENTS ASSOCIATION

The Cybotic Student Association of the Department of Computer Science and Engineering at Mangalore Institute of Technology and Engineering is a platform where innovation, knowledge, and leadership come together. Guided by the belief that technology should serve both industry and society, Cybotic inspires students to explore IoT, Cybersecurity, Artificial Intelligence, and Blockchain with creativity and responsibility.

Through workshops, hackathons, research showcases, industry collaborations, and outreach programs, Cybotic turns learning into real-world experience. It builds critical thinking, teamwork, and resilience, preparing students to shape the digital future with confidence.

The departmental magazine, ICONIC, reflects this vision. More than a record of events, it is a celebration of ideas, achievements, and community, connecting students, faculty, alumni, and industry. ICONIC highlights milestones of success and inspires the next generation to dream bigger, aim higher, and lead with integrity.

Visit Us at: <https://mite.ac.in/iot-cybersecurity-blockchain-technology/>



# PREFACE...

It gives me immense pleasure to present this edition of our Department Magazine, a platform that reflects the creativity, knowledge, and achievements of our students and faculty of **CSE(IoT Cyber Security with Blockchain Technology)**.

Our department is dedicated to nurturing young minds in emerging technologies that are reshaping the future of the digital world. With the rapid evolution of **Internet of Things**, the ever-growing need for **Cybersecurity**, and the revolutionary impact of **Blockchain technology**, we are preparing our students to become innovators, problem-solvers, and leaders in this dynamic technological landscape.

This magazine is not only a compilation of articles, projects, and achievements but also a testament to the enthusiasm and talent of our students. It provides them an opportunity to express their ideas, share knowledge, and showcase their innovative spirit.

I take this opportunity to appreciate the hard work of the editorial team, faculty mentors, and students whose collective efforts have brought this magazine to life. I encourage all students to continue exploring, learning, and contributing meaningfully to society through technology.

Let us work together with dedication and passion to make our department a hub of innovation and excellence.

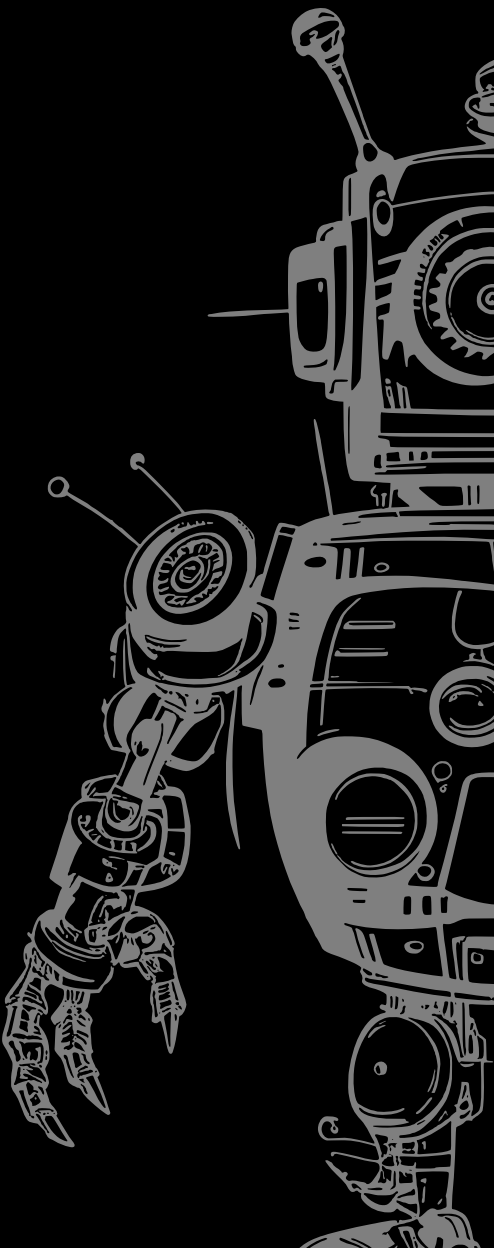


**Dr. Shivananda V. Seeri**

Professor and HOD,  
CSE (IoT & Cyber Security with Blockchain Technology)



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# EDITORIAL DESK

## "SECURING THE CONNECTED FUTURE: FROM SMART DEVICES TO TRUSTED SYSTEMS"

The 21st century is an age of connections. Billions of devices such as phones, cars, homes, and even entire cities are now linked through the Internet of Things. This seamless digital fabric promises convenience, efficiency, and intelligence like never before. But with opportunity also comes risk. Every new connection becomes a new entry point for threats. In a world where data is the new currency, cybersecurity is no longer optional, it is the foundation of trust.

As students of Computer Science and Engineering in IoT, Cybersecurity with Blockchain Technology, we stand at the intersection of innovation and responsibility. The future of technology will not only be measured by how smart our systems are, but also by how secure, transparent, and reliable we make them. From blockchain enabled supply chains to IoT powered healthcare, our challenge is to design solutions that people can trust with their data, privacy, and lives.

Another reality of our time is the rise of Generative AI. While it enables faster development and learning, it must be used wisely. For cybersecurity professionals, blind reliance on AI generated code or reports without understanding is risky. Instead, AI should be treated as a partner in innovation, a tool that accelerates learning but never replaces reasoning.

The expectations from today's engineers are higher than ever. Industries no longer seek graduates who only know technologies, they seek innovators who can secure, optimize, and create. To meet this challenge, every student must practice problem solving daily, not just for exams but for mastery. They must understand IoT and blockchain beyond buzzwords and explore their real world applications. They must treat cybersecurity as a mindset, not just a subject, and embrace continuous learning because technology will never stand still.

At MITE, our department nurtures not just coders but architects of the future, students who will defend systems, build trust, and lead innovation. The journey is not easy, but it is deeply meaningful. Always remember, the future of technology is not just about connecting things, it is about protecting people.

The connected future awaits. Let us build it wisely.

**Sandeep Seetaram Naik**

Asst. Professor

CSE (IoT & Cyber Security with Blockchain Technology)

# DEPARTMENT ACTIVITIES

The Department has been actively engaging students through a blend of technical, creative, and innovative programs. From workshops and coding challenges to research driven initiatives, each event is designed to enhance practical knowledge, teamwork, and problem solving skills. These activities not only strengthen technical foundations but also nurture innovation, leadership, and collaboration among students.





# INAUGURATION OF Cybotic Activity

06-11- 2024



## INAUGURATION HIGHLIGHTS:

- Inauguration of the CYBOTIC Club activities for the academic year 2024-25.
- Inspirational address by Mr. Santosh V. Y, Delivery Head, Vidita Solutions, Mangalore.
- Oath-taking ceremony by newly elected office bearers and felicitation of achievers.

The inauguration of the CYBOTIC Club activities for the academic year 2024-25 was held on November 6, 2024, at Mangalore Institute of Technology and Engineering (MITE) with great enthusiasm and grandeur. Graced by the presence of the Principal, Dr. Prashanth C. M., the Head of Department, Dr. Shivananda V. Seeri, and the distinguished Chief Guest, Mr. Santosh V. Y, the event reflected a harmonious blend of tradition and innovation. The ceremony featured the lamp-lighting ritual, the introduction and oath-taking of the new office bearers, and an insightful address by the Chief Guest, who emphasized the transformative role of technology and the importance of innovation in shaping the future. Felicitation of achievers added to the celebratory spirit, making the occasion a memorable beginning to the Cybotic Club's journey for the year.



# DEPARTMENT WORKSHOP

## 1. WORKSHOP ON “ETHICAL HACKING”

The Department of Computer Science & Engineering (IoT & Cyber Security with Blockchain Technology), Mangalore Institute of Technology & Engineering (MITE), organized a three-day intensive workshop on “Ethical Hacking” from April 21–23, 2025 at the Siemens II Lab, Post-Graduation Block. The program was conducted in association with the Research Council, MITE, and sponsored by Cybotic.

The workshop was led by Ms. Swathi Kanthraj, a distinguished cybersecurity professional with over 12 years of expertise in cybersecurity, cloud security, and risk management, having served at leading organizations such as IBM, Capgemini, Amazon, Tesco, and Infosys. Holding multiple global certifications, including CISM, Security+, and CCNA, she enriched the sessions with a perfect blend of academic depth and real-world insights.

Across the three days, participants were immersed in both conceptual learning and rigorous hands-on practice. Core topics included ethical hacking principles, vulnerability assessment, penetration testing methodologies, intrusion detection systems, and cryptography. Practical sessions introduced participants to industry-standard tools such as Nmap, Burp Suite, Metasploit, and OpenSSL, through which they gained proficiency in network scanning, web application testing, encryption, and decryption techniques.

The workshop successfully empowered participants to understand and mitigate modern cyber threats, equipping them with essential skills to pursue careers in ethical hacking and cybersecurity. By bridging theory with practical application, the program fostered a deeper appreciation of cybersecurity’s critical role in safeguarding digital infrastructures. The event received high acclaim for its engaging delivery, practical relevance, and transformative impact on participants’ technical expertise and professional outlook.



The poster for the 'Workshop on Ethical Hacking' is divided into several sections. At the top, it identifies the 'Resource Persons' as Mr. Bharath Kumar N, an Information Security Enthusiast from DLithe Consultancy Services Pvt. Ltd. Below this, it lists the 'Head of the Department' as Dr. Shivananda V. Seerl, the 'Dean - Research, MITE' as Dr. Pradeep B S, and the 'Coordinator' as Mr. Sandeep Seetaram Naik, an Asst. Professor, Dept. of CSE (IoT & Cybersecurity with Blockchain Technology). The 'Outcome of the Workshop' section lists five bullet points: understanding the basics of ethical hacking, learning about vulnerability assessment and exploitation, understanding penetration testing methodologies, familiarizing with various tools and techniques used in ethical hacking, and exploring career opportunities in ethical hacking. The poster also mentions the dates '21st to 23rd April 2025' and the location 'Siemens II Lab'. At the bottom, there is a photograph of the Mangalore Institute of Technology & Engineering building.

## 2. WORKSHOP ON “IoT with Analytics Prototyping Design”



The poster for the 'Workshop on IoT with Analytics Prototyping Design' features the MITE logo and name at the top, along with accreditation details. It states that the workshop is presented by the 'DEPARTMENT OF CSE (IoT & CYBER SECURITY WITH BLOCKCHAIN TECHNOLOGY)' in association with the 'Computer Society of India'. The central graphic shows a stylized brain made of data points. Below this, it specifies the dates 'May 19-21, 2025' and the location 'IoT Programming Lab'. A 'Registration Link' is provided as <https://forms.gle/B2SAk3cfzHyIXN9>. At the bottom, there is a photograph of the Mangalore Institute of Technology & Engineering building.

The Department of CSE (IoT & Cyber Security with Blockchain Technology), in association with the Computer Society of India, organized a three-day workshop on “IoT with Analytics Prototyping Design” from May 19–21, 2025 at the IoT Lab, Post-Graduation Block. Facilitated by Mr. Vijay G. H., Head of Technology at DLithe Consultancy Services Pvt. Ltd., the workshop provided a holistic understanding of IoT through sessions on system architecture, hardware components, communication protocols, and sensor integration, enriched with case studies and live demonstrations showcasing IoT’s role in automation, real-time monitoring, and data-driven decision-making. Participants engaged in hands-on sessions covering microcontroller programming, data acquisition, wireless communication, cloud connectivity, visualization using Plotly dashboards, and exploratory data analysis, with advanced modules introducing predictive analytics and machine learning on IoT datasets. The workshop culminated in an end-to-end IoT project, enabling attendees to design prototypes that integrated sensing, storage, visualization, and analytics. Widely appreciated for its comprehensive approach and seamless blend of theory with practice, the program empowered participants with industry-relevant skills, innovation-driven learning, and the confidence to build impactful IoT solutions for the future.



# CYBOTIC ACTIVITIES

## 1.CODE CREST :“Bid, Build, Break”

The Cybotic Student Association of the Department of CSE (IoT & Cyber Security with Blockchain Technology) hosted its flagship technical event, “Code Crest – Bid, Build, Break,” on April 25–26, 2025 at the IoT Lab, PG Block. With the enthusiastic participation of over 100+ students across 25 teams, the event emerged as one of the most prestigious and large-scale competitions of the year, offering a vibrant platform to nurture innovation, teamwork, and technical excellence.



Spanning two power-packed days, the competition featured three dynamic rounds—Hackathon with Reverse Coding, Coding Auction, and Tech Rumble (1-on-1 coding battles)—that evaluated participants on much more than coding proficiency. Teams were tested on their problem-solving ability, collaborative spirit, presentation clarity, strategic thinking, and resilience under pressure, simulating the demands of real-world hackathon culture. Conducted on the Hackerrank platform, the event created an authentic coding environment that fostered both creativity and competition. After an intense showcase of talent, Team Numeronauts secured first place, followed by Team Mutex and Team V R Cooked, sharing a prize pool of ₹6,000. Celebrated for its flawless organization, spirited participation, and electrifying atmosphere, Code Crest was hailed as a grand success, leaving a lasting impression as a premier event that truly embodied the spirit of collaboration, innovation, and technical mastery at MITE.

## 2.WEB DASH 2.0 :“Connect, Visualize, Act”



As part of its mission to encourage creativity and technical excellence, the Cybotic Student Association organized “Web Dash 2.0” on May 10, 2025 at the IoT Lab, PG Block. With the active participation of 35 enthusiastic teams, the competition provided a dynamic platform for students to sharpen their coding, design, and problem-solving skills in the field of modern web development.

The event unfolded in two intellectually stimulating rounds—“Bug in the Beauty” and “Frontend Fusion.” The first round tested participants’ precision, analytical thinking, and debugging skills, while the second challenged 19 shortlisted teams to design and deploy fully functional websites under time constraints. Teams were evaluated not only on technical knowledge but also on creativity, user experience, collaboration, and presentation.

After a day of spirited competition, Team Logs emerged as the winners, followed by Team Sigmoid and Team Code Designers, sharing a prize pool of ₹6,000. The event was praised for its seamless execution, vibrant participation, and focus on practical relevance, marking it as a grand success that truly showcased innovation, teamwork, and technical mastery at MITE.



### 3.Man Vs Bug – Season 2

In pursuit of nurturing technical excellence and fostering a spirit of innovation, the Cybotic Student Association of the Department of CSE (IoT & Cybersecurity with Blockchain Technology) organized “Man Vs Bug – Season 2” on 12th December 2024 at the IoT Lab, PG Block, MITE. The competition drew the active participation of 66 students, providing them with a vibrant platform to demonstrate their coding proficiency, analytical reasoning, and debugging expertise.



The event was structured into two meticulously designed rounds. The first round, a technical multiple-choice questionnaire, assessed participants’ knowledge in programming, data structures, algorithms, and debugging within strict time limits, thereby testing both precision and speed. The second round challenged the top five teams in a hands-on debugging session conducted on the HackerRank platform, where participants were tasked with resolving errors in four coding problems under time-bound conditions. This round closely simulated real-world industry challenges, emphasizing both technical accuracy and problem-solving agility.

The competition was widely commended for its professional execution, industry-relevant tasks, and intellectually stimulating environment. It succeeded not only in strengthening students’ technical competencies but also in cultivating essential soft skills such as time management, teamwork, and adaptability under pressure.

“Man Vs Bug – Season 2” emerged as a resounding success, embodying the core values of innovation, perseverance, and excellence that define MITE. The event reinforced the institute’s commitment to providing transformative learning experiences that prepare students to excel in the ever-evolving landscape of technology.



# DEPARTMENT ACTIVITIES

## 1. TOURISM PROMOTION – INNOVATIVE APPROACHES

As part of the AICTE Activity Program, the Department of CSE (IoT & Cyber Security with Blockchain Technology) organized a month-long initiative on “Tourism Promotion – Innovative Approaches” from February 23 to March 23, 2025, with active participation from 63 third-year students. The activity was designed to instill awareness about cultural heritage, ecological balance, and the significance of sustainable tourism, while also fostering responsibility, teamwork, and social consciousness among students.



During the program, students explored a series of culturally and environmentally significant locations, including Thodar Falls, Konaje Kallu, Malpe Beach, Saavira Kambada Basadi, and Kadalkere Nisarga Dhama. Each visit offered unique learning experiences—understanding biodiversity and ecology at Thodar Falls, trekking and appreciating natural formations at Konaje Kallu, exploring marine ecosystems at Malpe Beach, studying architectural brilliance at the Thousand Pillars Jain Temple, and reflecting on eco-tourism initiatives at Kadalkere Nisarga Dhama. These explorations not only broadened students’ perspectives on tourism but also highlighted the importance of conserving regional treasures while promoting them responsibly.



The initiative was highly impactful, providing students with a holistic exposure that blended heritage appreciation, environmental awareness, and sustainable practices. By combining experiential learning with social responsibility, the activity successfully fulfilled its objective of encouraging innovative approaches to tourism while aligning with the larger goals of the AICTE Activity Program.



## 2.FACILITATING 100% DIGITIZED MONEY TRANSACTIONS

In alignment with the national mission of Digital India and the objectives of the AICTE Activity Point Program, the Department of CSE (IoT & Cyber Security with Blockchain Technology) organized an impactful awareness initiative on “Facilitating 100% Digitized Money Transactions” on May 28, 2025. A total of 63 third-year students actively participated in the program, which was designed to promote digital financial literacy, encourage the adoption of cashless transactions, and educate the public on secure digital practices. The activity also highlighted how digitization of money is not only a matter of convenience but also a step toward creating a transparent, inclusive, and resilient economy.

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Beyond technical demonstrations, the activity highlighted the broader socio-economic benefits of digital transactions. Students explained how cashless systems improve transparency, reduce corruption, simplify financial tracking, and enhance the efficiency of government welfare schemes through Direct Benefit Transfers (DBT). The local community showed great interest, engaging in discussions and seeking clarifications on safety and usage. By patiently addressing their queries and providing step-by-step guidance, the students built confidence among participants to gradually adopt cashless methods in their daily lives. The program was praised for its practical execution and community impact, standing out as a significant step toward empowering citizens and supporting India’s vision of becoming a digitally inclusive economy.

The initiative not only created awareness among the community but also offered valuable learning experiences for the students themselves. By directly engaging with people, explaining complex concepts in simple terms, and addressing real-world concerns, the participants developed skills in communication, leadership, and social responsibility. This dual impact—empowering the public while shaping socially conscious professionals—made the activity a true success, reflecting the commitment of both AICTE and the institution to building a digitally empowered society.







# STUDENT

## ACHIVEMENTS



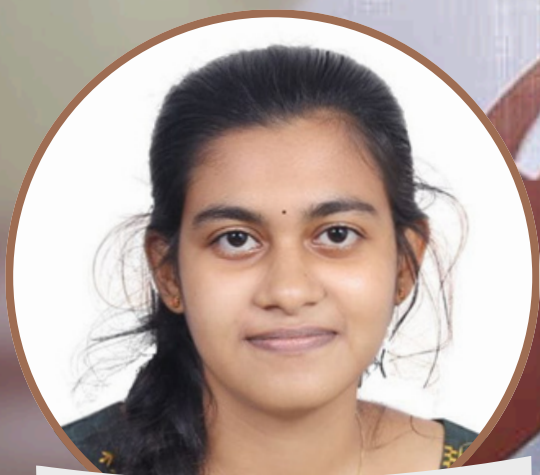


# VTU

**Achieved Total 9 Ranks  
in VTU**

**2024-2025**

## Rank Holders



**Deeksha B Devadiga**



**VTU 1<sup>st</sup> Rank &  
GOLD MEDAL HOLDER**

I feel truly blessed to be a part of the Computer Science and Engineering (IoT & Cybersecurity with Blockchain Technology) department, where learning extends far beyond core concepts to the exciting frontiers of IoT, cybersecurity, and blockchain. What makes this journey truly special is the unwavering support and inspiration from our faculty, who are not just teachers but mentors guiding us to think differently, challenge ourselves, and turn ideas into meaningful outcomes. Their mentorship has empowered me to dream bigger and face the future with confidence. Equally important are the friendships I've formed—bonds that have turned classmates into a family. From late-night study sessions and stressful deadlines to shared laughter and unforgettable memories, my friends have been my greatest strength. College may give us a degree, but it is the friendships, guidance, and memories that truly shape who we are, making this experience an emotional journey of growth, support, and inspiration that I will cherish forever.



# VTU RANK HOLDERS



**VARSHA SHETTY**  
2<sup>ND</sup>



**PRAJWAL D**  
3<sup>RD</sup>



**SHARATH M D**  
4<sup>TH</sup>



**REETHU**  
5<sup>TH</sup>



# VTU RANK HOLDERS



ANVITHA G RAO  
6<sup>TH</sup>



HEMANTH B  
7<sup>TH</sup>



KRITHI K  
8<sup>TH</sup>



SHAMYA  
10<sup>TH</sup>





**HEMANTH B**



**PRAJWAL D**

# **BE HONOURS**

## **2024-25**



**SHARATH M D**



**KSHITHISH**



# IDEAS FUNDED UNDER NAIN 2.0

## VRITARA - A SMART SAFETY WEARABLE DEVICE



A team of Computer Science and Engineering (IoT, Cybersecurity with Blockchain) students, Batch of 2027 from Mangalore Institute of Technology & Engineering (MITE), are developing Vritara, a next-generation wearable safety watch dedicated to protecting lives. The project was pitched under NAIN 2.0 and has been awarded ₹4,00,000 for prototype development

Designed with safety at its core, Vritara enables real-time emergency alerts, live location tracking, and secure evidence collection, ensuring immediate support during critical situations. This milestone highlights the team's commitment to innovation in personal safety and their vision of building a more secure future through technology.





# CLASS TOPPERS

2024-25

## 4<sup>TH</sup> YEAR



**VARSHA**



**DEEKSHA**

## 3<sup>RD</sup> YEAR



**ABDUL**



**AMULYA**

## 2<sup>ND</sup> YEAR

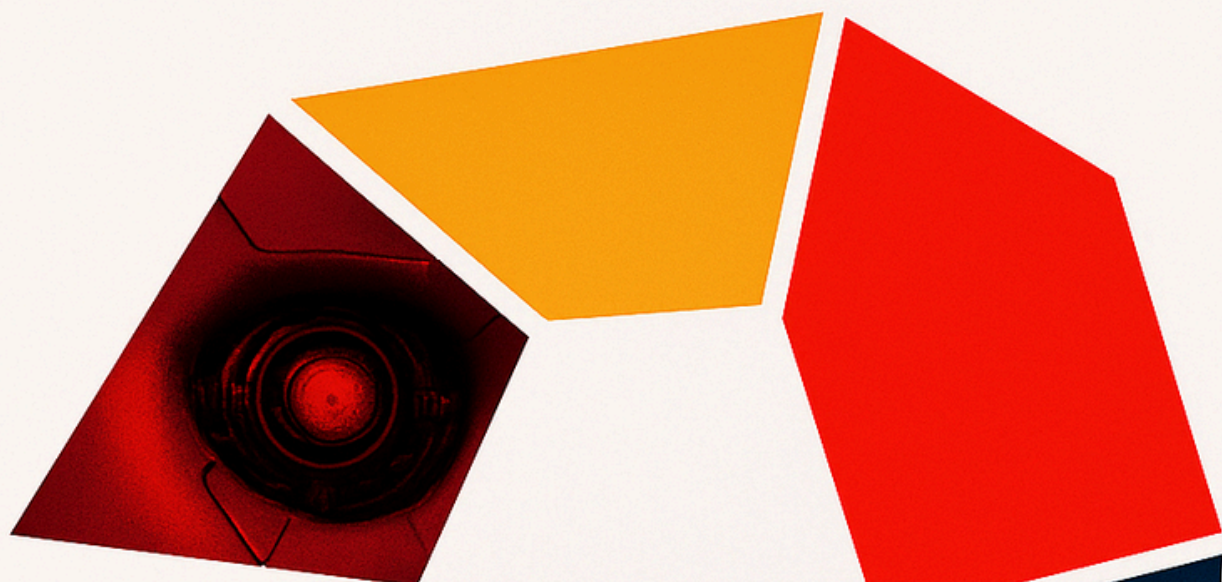


**FIONA**



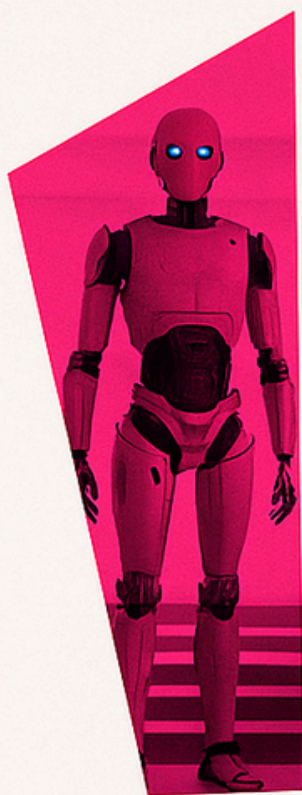
**NIKHIL**





# **FACULTY**

## **ARTICLE**





# Beyond the Headlines:

*"If you know yourself but not the enemy, for every victory gained, you will also suffer a defeat"*

*-Sun Tzu, The Art of War*

## Your First Steps into Ethical Hacking

### Understanding the Mindset: The White Hat vs. the Black Hat

In the digital world, the term "hacker" often conjures images of malicious actors trying to steal data or cause chaos. However, a significant and growing field, known as ethical hacking, uses the same techniques as cybercriminals for a very different purpose: to protect. Ethical hackers, often called "white hats," are cybersecurity professionals who systematically test a company's systems to find vulnerabilities before a "black hat" or malicious hacker can exploit them. They operate with explicit permission and are crucial in fortifying our digital infrastructure.



### The Operating System: Kali Linux:

Before diving into individual tools, it's important to mention the platform of choice for many ethical hackers: Kali Linux. This open-source, Debian-based operating system is specifically designed for penetration testing and digital forensics. It comes pre-installed with hundreds of tools, saving security professionals the trouble of manually installing and configuring them. Kali Linux is a complete ecosystem that provides a streamlined environment for security assessments.

### Information Gathering & Network Reconnaissance:

The first step in any ethical hacking engagement is reconnaissance, or gathering information about the target. You can't protect what you don't understand.

- **Nmap** (Network Mapper): Nmap is a foundational tool. It is used to discover hosts and services on a computer network by sending packets and analyzing the responses. Nmap can tell you which devices are connected to a network, what services they are running, and even what operating system they use.
- **Wireshark**: This is a free and powerful network protocol analyzer. Wireshark allows you to capture and interactively browse the traffic running on a computer network. Ethical hackers use it to "sniff" network traffic, helping them identify suspicious activities, analyze data packets, and understand how information is flowing through the network.

### Exploitation & Vulnerability Analysis:

- Once you have a clear picture of the network and its services, the next phase is to analyze potential weaknesses and, if permitted, test them. This is where tools for exploitation and vulnerability assessment come in.
- **Metasploit Framework**: This is one of the most widely used and powerful frameworks for penetration testing. Metasploit provides a vast database of exploits, payloads, and other modules that ethical hackers can use to simulate real-world attacks. It helps professionals understand if a vulnerability is truly exploitable and the potential damage it could cause.
- **Burp Suite**: For ethical hackers focusing on web applications, Burp Suite is indispensable. It's a comprehensive platform for testing the security of web-based applications. Burp Suite is particularly effective at finding common web vulnerabilities like SQL injection and cross-site scripting (XSS) by acting as a proxy between the user's browser and the web server.



## Password Cracking and Security Testing:

Even the most secure network can be compromised by a weak password. Ethical hackers use specific tools to test password strength and identify common credential vulnerabilities.

- **John the Ripper:** A fast and flexible password cracker, John the Ripper is used to test the strength of passwords by attempting to guess them through brute-force and dictionary attacks. It's a vital tool for assessing the effectiveness of password policies within an organization.
- **Hydra:** As its name suggests, Hydra is a formidable tool for performing brute-force attacks against a wide range of network services. It's designed to crack login credentials for various protocols, from SSH and FTP to databases and web forms.

Ethical hacking is not a one-time task but a continuous process of assessment and improvement. The tools mentioned here are just a small sample of the vast and ever-evolving arsenal used by cybersecurity professionals. By thinking like a hacker and using these powerful tools, ethical hackers play a critical role in building a more secure and resilient digital world.

**Aneesh Kumar A**

Assistant Professor,

CSE (IoT & Cyber Security with Blockchain Technology)

# Engineering Your Habits

For a student of engineering, a life of endless problem-solving is the norm. We meticulously design circuits, write lines of code, and build complex structures. But while we're busy designing the future, many of us are falling victim to a system we never intended to build: a cycle of stress, distraction, and unhealthy habits.

It's easy to get caught in what feels like a digital loop. We grab our phones for a quick break and suddenly an hour has vanished. Social media, gaming, and endless videos are masterfully engineered to give us quick hits of dopamine, that little rush of satisfaction. But as engineers, we know a problem isn't something to ignore—it's something to solve.

The first step is a **root cause analysis**. Don't just blame yourself for being "addicted." Ask *why* you're reaching for that distraction. Are you feeling overwhelmed by a project? Are you lonely? Are you just bored? Identifying the core issue is the first step toward a real solution.

Next, it's time Try the **Pomodoro Technique**: work for 25 minutes, then take a 5-minute break. This gives your brain the short reward it craves, but on your terms. Use apps that limit screen time on social media to turn your passive scrolling into an active choice. Most importantly, you need to **optimize your well-being**. Think of your body as a high-performance machine. It needs the right fuel. Your brain's ability to focus and solve problems is directly linked to what you eat, how much you sleep, and whether you get enough exercise. A walk in the fresh air can "debug" your mind faster than any digital distraction.

Your **engineering journey is not just about building things; it's about building a life**. By using the same logical and analytical skills you apply to your academic work, you can take control of your habits, break the cycle of distraction, and build a more productive and balanced life.

**Ms. Vijayalaxmi H Manjunatha**

Assistant Professor,

CSE (IoT & Cyber Security with Blockchain Technology)



# Agentic AI:

## *THE RISE OF AUTONOMOUS INTELLIGENT AGENTS IN 2025*

### Abstract

Artificial Intelligence (AI) has progressed rapidly from rule-based systems to generative models capable of producing text, images, and code. The current trajectory in 2025 highlights a new paradigm known as Agentic AI. Unlike conventional AI, which is reactive and requires direct user input, agentic AI demonstrates autonomy by planning and executing tasks with minimal human intervention. This article explores the significance of agentic AI, its applications, benefits, associated risks, and its future trajectory.

### Introduction

The integration of Artificial Intelligence into professional and academic domains has transformed organizational workflows and decision-making processes. With the advancement of generative AI, much attention has been placed on its ability to simulate human-like responses. However, 2025 marks the emergence of Agentic AI, an evolution that moves beyond generative capabilities towards autonomous problem-solving. Gartner has identified agentic AI as one of the top strategic technology trends of 2025, forecasting that by 2028, approximately 15% of routine decisions will be made autonomously by intelligent agents. This development underlines the growing role of AI systems not only as support tools but as independent actors within complex environments.

### Applications of Agentic AI

Agentic AI exhibits wide-ranging applications across multiple industries:

- **Manufacturing and Logistics:** Intelligent agents monitor supply chains, predict disruptions and autonomously adjust operations to maintain efficiency.
- **Healthcare:** Decision-support agents assist clinicians in diagnosis, treatment planning and administrative workflows, thereby reducing human error and increasing precision.
- **Financial Services:** Autonomous trading and risk analysis systems evaluate markets, predict trends, and execute high-frequency transactions.

# Artificial Intelligence

## Introduction





## Technical Foundations

Agentic AI systems typically function through four interdependent stages:

1. **Perception** – Gathering and interpreting data from diverse sources.
2. **Planning** – Developing a sequence of actions to achieve defined objectives.
3. **Execution** – Carrying out tasks without constant human oversight.
4. **Feedback and Adaptation** – Evaluating outcomes and refining strategies for improved performance.

This architecture allows agents to operate with increasing levels of autonomy and sophistication.

## Benefits

The implementation of agentic AI offers significant advantages:

- **Operational Efficiency** – Automating repetitive and time-intensive processes.
- **Scalability** – Managing complex, large-scale operations beyond human capacity.
- **Personalization** – Delivering tailored solutions in domains such as finance, healthcare, and education.
- **Innovation Enablement** – Creating new possibilities for autonomous research, workflow optimization, and digital transformation.

## Risks and Ethical Considerations

Despite its potential, agentic AI raises important challenges:

- **Transparency**: The decision-making process of autonomous systems is often opaque, raising concerns of accountability.
- **Bias and Fairness**: Models trained on biased datasets risk perpetuating inequalities.
- **Security**: Autonomous agents may be vulnerable to adversarial exploitation if not adequately safeguarded.
- **Governance**: Determining appropriate levels of human oversight is crucial to balance autonomy with responsibility.

## Future Outlook

The progression of agentic AI suggests several foreseeable developments:

- **Integration into Enterprise Systems**: Autonomous agents will become a standard feature across business and research environments.
- **Policy and Regulation**: National and international frameworks will emerge to ensure ethical and responsible deployment.
- **Collaborative Multi-Agent Systems**: Networks of intelligent agents will cooperate to solve complex, interdisciplinary problems.
- **Human-AI Collaboration**: Rather than replacing human roles, agentic AI will augment human capabilities, serving as a digital co-worker that enhances creativity and decision making.



## Conclusion

Agentic AI signifies a transformative phase in the evolution of artificial intelligence. By moving from reactive assistance to proactive autonomy, these intelligent agents are poised to reshape industrial, academic, and social landscapes. While the benefits are substantial, careful attention must be paid to the ethical, regulatory, and security dimensions. For departments, industries, and governments, preparing for this shift is essential to harness the opportunities of agentic AI while mitigating its risks.

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# Blockchain Technology in Agriculture

Blockchain technology is transforming agriculture by making the sector more transparent, efficient, and reliable. It acts as a secure digital ledger that records every transaction in the food supply chain, from the farmer's field to the consumer's plate. This ensures traceability, allowing people to know the true origin and quality of their food. One of its biggest benefits is food safety. Blockchain, combined with sensors and digital records, makes it possible to track storage and transport conditions. In case of contamination, the exact source can be identified quickly, making recalls faster and safer. It also helps verify organic and fair-trade certifications, reducing fraud and building consumer trust. For farmers, Blockchain brings fairness and empowerment. Through smart contracts, farmers receive instant payments once deliveries are confirmed, without depending on middlemen. Blockchain also supports land ownership records and digital identities, giving small farmers better access to loans, credit, and insurance. Sustainability is another advantage. By recording water usage, fertilizer application, and carbon emissions, Blockchain promotes eco-friendly farming and responsible practices. Globally, companies like Walmart and Unilever are already using Blockchain in agriculture, and in India, pilot projects are tracking seeds and crop lifecycles with this technology.

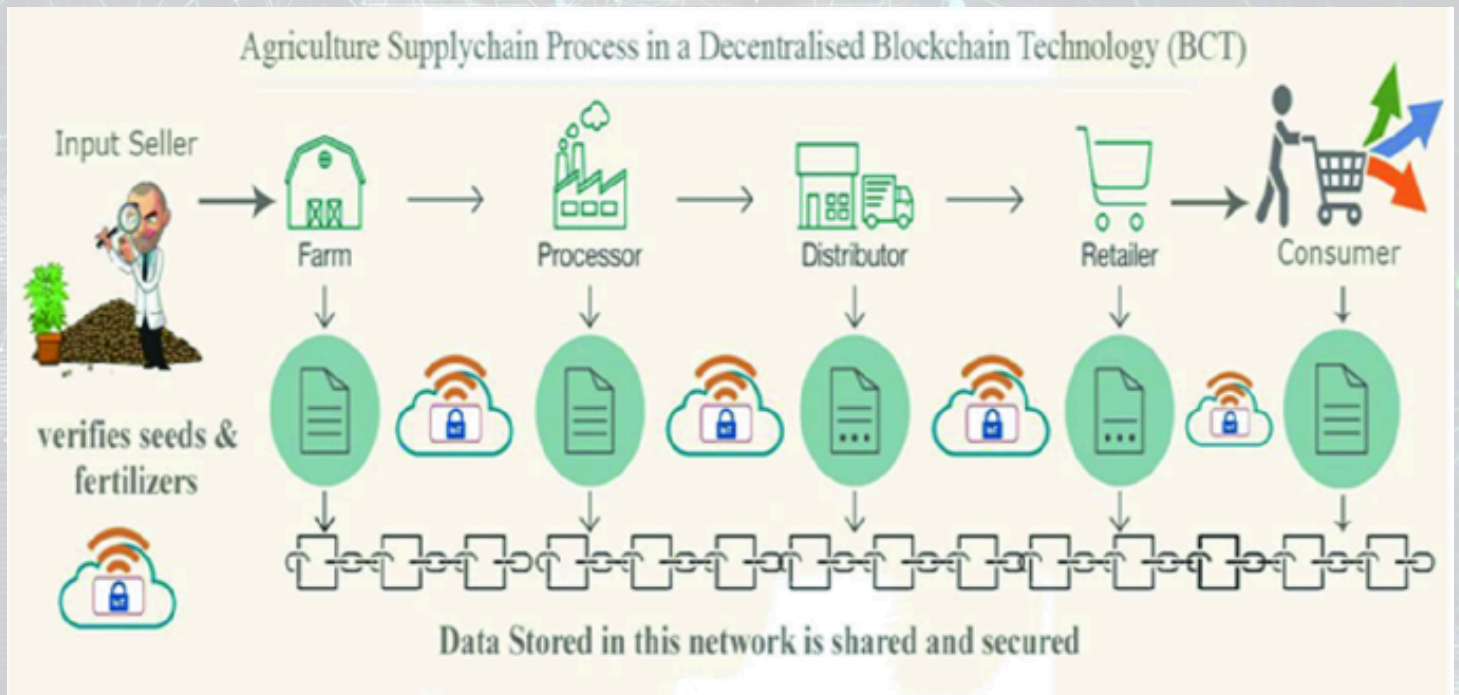
Another important contribution of Blockchain is reducing food wastage. A huge portion of food is lost due to inefficiencies in the supply chain, including delays and poor storage. Blockchain ensures real-time tracking of goods and automates alerts when products are nearing expiration, allowing quicker redistribution and reducing overall waste. Global trade in agriculture also benefits from Blockchain integration. Exporters and importers often face challenges with paperwork, cross-border regulations, and trust issues. Blockchain simplifies these processes by creating tamper-proof digital records, cutting down fraud, and making transactions faster. This particularly helps developing nations access international markets more effectively. The technology is also useful in precision farming. By combining IoT devices with Blockchain, farmers can store accurate data about soil health, crop growth, and weather conditions. This data-driven farming not only improves productivity but also enables better decision-making and transparency for buyers who want assurance about sustainable practices. In addition, Blockchain plays a role in insurance and risk management for agriculture. Farmers face unpredictable risks such as floods, droughts, and pests. Smart contracts can automate insurance claims based on verified data from weather stations or sensors. This reduces delays, ensures fair compensation, and gives farmers financial security during crises.

Finally, Blockchain encourages collaboration across the agricultural ecosystem. Governments, food companies, logistics providers, and consumers can all connect on a single transparent platform. This shared digital trust creates stronger partnerships, reduces disputes, and drives innovation in farming techniques and supply chain management.



In conclusion, Blockchain is a game-changer for modern agriculture. It not only strengthens food safety and consumer trust but also empowers farmers and supports sustainable farming. With wider adoption, it promises to make agriculture smarter, fairer, and more future-ready.

The block diagram is given below.



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# ALUMNI

## SECTION





# ಕಂಬಳ ಮತ್ತು ಕೋಳಿ ಅಂಕ: ಉಳಿಯಬೇಕಾದ ಪರಂಪರೆ ಇತಿಹಾಸದ ಹೆಜ್ಜೆಗುರುತು

ಕಂಬಳ ಮತ್ತು ಕೋಳಿ ಅಂಕವು ಶತಮಾನಗಳಿಂದ ಕರ್ನಾಟಕದ ಕರಾವಳಿ ಹಾಗೂ ಗ್ರಾಮೀಣ ಪ್ರದೇಶಗಳಲ್ಲಿ ನಡೆಯುತ್ತಿವೆ. ಇವುಗಳನ್ನು ಜನರು ಕೇವಲ ಮನರಂಜನೆಗಾಗಿ ಅಲ್ಲ, ದೈವಗಳಿಗೆ ಕೃತಜ್ಞತೆ ಸಲ್ಲಿಸುವ ಸಂಕೇತವಾಗಿ ಆಚರಿಸುತ್ತಿದ್ದರು. ಹೊಲದಲ್ಲಿ ಬೆಳೆಯಾದಾಗ ಅಥವಾ ಹಳ್ಳಿಯಲ್ಲಿ ಹಬ್ಬದ ಸಂದರ್ಭದಲ್ಲಿ ಈ ಕ್ರೀಡೆಗಳು ದೊಡ್ಡ ಹಬ್ಬದಂತೆ ನಡೆದುಬರುತ್ತಿದ್ದವು. ಈ ಮೂಲಕ ಪ್ರತಿ ಪೀಳಿಗೆಗೆ ನಮ್ಮ ಸಂಸ್ಕೃತಿಯ ಸವಿಯನ್ನೇ ನೀಡಲಾಗಿದೆ.

## ಸಂಸ್ಕೃತಿಯ ಜೀವಾಳ

- **ಕಂಬಳ:** ಹೊಲದಲ್ಲಿ ಎತ್ತುಗಳನ್ನು ಓಡಿಸುವ ಈ ಕ್ರೀಡೆ ರೈತರ ಶ್ರಮ ಮತ್ತು ಎತ್ತುಗಳ ಶಕ್ತಿಯನ್ನು ತೋರಿಸುತ್ತದೆ. ಇದು ರೈತನ ಬದುಕಿನ ಭಾಗವಾಗಿದ್ದು, ಅವನ ಹತ್ತಿರದ ಎತ್ತುಗಳ ಮೇಲೆ ಇರುವ ಪ್ರೀತಿ ಮತ್ತು ಕಾಳಜಿಯನ್ನು ಪ್ರತಿಬಿಂಬಿಸುತ್ತದೆ.
- **ಕೋಳಿ ಅಂಕ:** ಕರಾವಳಿಯ ದೇವರ ನಂಬಿಕೆ ಹಾಗೂ ಜನಸಾಮಾನ್ಯರ ಏಕತೆಯನ್ನು ಕಟ್ಟುವ ಶಕ್ತಿಯಾಗಿದೆ. ಹಳ್ಳಿಯ ಜನರು ಒಟ್ಟಾಗಿ ಸೇರಿ ಧಾರ್ಮಿಕ ಆಚರಣೆ, ಹಬ್ಬ, ಹರ್ಷ-ಸಂತೋಷದಲ್ಲಿ ಭಾಗವಹಿಸುವ ಮಾಧ್ಯಮ.

## ರೈತರ ಬದುಕಿಗೆ ಆಧಾರ

ಕಂಬಳವು ಕೇವಲ ಕ್ರೀಡೆ ಮಾತ್ರವಲ್ಲ, ರೈತರ ಬದುಕಿನ ಅವಿಭಾಜ್ಯ ಅಂಗವಾಗಿದೆ. ಎತ್ತುಗಳನ್ನು ಆರೋಗ್ಯಕರವಾಗಿಡಲು, ಅವುಗಳನ್ನು ಶಕ್ತಿಶಾಲಿಗಳನ್ನಾಗಿ ಮಾಡಲು ಕಂಬಳ ಮಹತ್ವದ ಪಾತ್ರವಹಿಸುತ್ತದೆ. ಕ್ರೀಡೆ ಇಲ್ಲದೆ ಹೋದರೆ, ಎತ್ತುಗಳನ್ನು ಬೆಳೆಸುವ ಸಂಪ್ರದಾಯವೇ ಕುಂದುತ್ತದೆ.

## ಪ್ರಾಣಿಹಿತದ ದೃಷ್ಟಿಯಿಂದ

ಕಂಬಳ ಮತ್ತು ಕೋಳಿ ಅಂಕದಲ್ಲಿ ಪ್ರಾಣಿಗಳಿಗೆ ಕ್ರೂರತೆ ತೋರಿಸಲಾಗುತ್ತದೆ ಎಂಬ ಅಭಿಪ್ರಾಯವು ತಪ್ಪು. ಹಳ್ಳಿಯ ಜನರು ಎತ್ತು ಹಾಗೂ ಕೋಳಿಗಳನ್ನು ಕುಟುಂಬದ ಸದಸ್ಯರಂತೆ ನೋಡಿಕೊಳ್ಳುತ್ತಾರೆ. ಅವುಗಳಿಗೆ ಉತ್ತಮ ಆಹಾರ, ಆರೈಕೆ, ವೈದ್ಯಕೀಯ ನೆರವು ನೀಡುತ್ತಾರೆ. ಇಂತಹ ಪ್ರಾಣಿಗಳಿಗೆ ವಿಶೇಷ ಗೌರವ ದೊರೆಯುವುದು ಈ ಸಂಪ್ರದಾಯಗಳ ಕಾರಣದಿಂದಲೇ.

## ಸಾಮಾಜಿಕ ಬಾಂಧವ್ಯ

ಈ ಕ್ರೀಡೆಗಳು ಹಳ್ಳಿಯ ಜನರನ್ನು ಒಂದೇ ವೇದಿಕೆಯಲ್ಲಿ ಸೇರಿಸುತ್ತವೆ. ಜಾತಿ, ಧರ್ಮ, ಆರ್ಥಿಕ ವ್ಯತ್ಯಾಸಗಳಿಲ್ಲದೆ ಎಲ್ಲರೂ ಒಂದಾಗಿ ಈ ಹಬ್ಬವನ್ನು ಆಚರಿಸುತ್ತಾರೆ. ಇದು ಸಮಾಜದಲ್ಲಿ ಒಗ್ಗಟ್ಟನ್ನು, ಸಹಕಾರವನ್ನು ಬೆಳೆಸುತ್ತದೆ.

## ಆರ್ಥಿಕ ಮಹತ್ವ

ಇಂತಹ ಹಬ್ಬಗಳು ಗ್ರಾಮೀಣ ಆರ್ಥಿಕತೆಗೆ ಸಹಕಾರಿಯಾಗುತ್ತವೆ. ಹಳ್ಳಿಯಲ್ಲಿ ಮೇಳ, ವ್ಯಾಪಾರ, ಸಾಂಸ್ಕೃತಿಕ ಕಾರ್ಯಕ್ರಮಗಳು ನಡೆಯುವುದರಿಂದ ಸ್ಥಳೀಯ ವ್ಯಾಪಾರಿಗಳಿಗೆ ಲಾಭವಾಗುತ್ತದೆ. ಜೊತೆಗೆ ಪ್ರವಾಸಿಗರು ಬಂದು ಗ್ರಾಮೀಣ ಪ್ರವಾಸೋದ್ಯಮಕ್ಕೂ ಉತ್ತೇಜನೆ ಸಿಗುತ್ತದೆ.

## ಪೀಳಿಗೆಯಿಂದ ಪೀಳಿಗೆಗೆ ಸೇತುವೆ

ನಮ್ಮ ಮಕ್ಕಳು ಮತ್ತು ಮುಂದಿನ ಪೀಳಿಗೆಗಳಿಗೆ ತಮ್ಮ ಸಂಸ್ಕೃತಿ, ಆಚರಣೆ, ಹಳ್ಳಿಯ ಒಗ್ಗಟ್ಟಿನ ಮಹತ್ವ ತಿಳಿಯಲು ಕಂಬಳ ಮತ್ತು ಕೋಳಿ ಅಂಕವು ಜೀವಂತ ಪಾಠಪುಸ್ತಕಗಳಂತಿವೆ. ನಿಷೇಧಿಸಿದರೆ ಈ ಪಾಠ ಕಳೆದುಹೋಗುತ್ತದೆ.





## ಸಮಾರೋಪ

ಕಂಬಳ ಮತ್ತು ಕೋಳಿ ಅಂಕವನ್ನು ನಿಷೇಧಿಸುವುದು ಕೇವಲ ಒಂದು ಕ್ರೀಡೆಯ ನಿಷೇಧವಲ್ಲ, ಅದು ಒಂದು ಜನಾಂಗದ ಅಸ್ತಿತ್ವ ಮತ್ತು ಆತ್ಮೀಯತೆಯ ಮೇಲೆ ಬಿಗಿದ ಹೊಡೆತ. ನಮ್ಮ ಸಂಪ್ರದಾಯವನ್ನು ಉಳಿಸುವುದು ಎಂದರೆ ನಮ್ಮ ಬೇರನ್ನು ಉಳಿಸುವುದು. ಅದರ ಕಾರಣಕ್ಕೆ, ಈ ಪರಂಪರೆಯನ್ನು ನಿಷೇಧಿಸುವ ಬದಲು, ಪ್ರಾಣಿಹಿತವನ್ನು ಕಾಪಾಡುತ್ತಾ ಸಂಸ್ಕೃತಿಯನ್ನು ಉಳಿಸುವ ಸಮತೋಲನದ ದಾರಿ ಹುಡುಕಬೇಕು. ಕಂಬಳ ಮತ್ತು ಕೋಳಿ ಅಂಕವು ಕರ್ನಾಟಕದ ಹೆಮ್ಮೆ, ಜನರ ನಂಬಿಕೆ ಮತ್ತು ಹಳ್ಳಿಯ ಒಗ್ಗಟ್ಟು ಎಂಬುದನ್ನು ನಾವು ಮರೆಯಬಾರದು.

ADITHI D J

## ಯೌವನದ ಹಾದಿ

ಮೊದಲ ದಿನ ಹೆಜ್ಜೆ ಇಟ್ಟಾಗ, ಹೃದಯ ನಡುಗಿತು  
ಹೊಸ ಮುಖದ ನಗುವು ನೋಡಿ ಮನಸ್ಸು ಕಂಗೊಳಿಸಿತು  
ಅಪರಿಚಿತರು ಸ್ನೇಹಿತರಾದರು, ದಿನಗಳು ಬದಲಾಯ್ತು  
ಕಾಲೇಜು ಜೀವನ ಕನಸಿನ ಹೂವಂತೆ ಅರಳಿತು

ಕ್ಲಾಸ್ ರೂಮಿನಲ್ಲಿ ಪಾಠ, ಕ್ಯಾಂಟೀನ್ ಚಹಾ  
ಗ್ರೂಪ್ ಸ್ಟಡಿಯಲ್ಲಿ ಮೊಜು ಮೈದಾನದಲ್ಲಿ ವಹಾ  
ರಭಸದಿಂದ ಓಡಿದೆ ಆ ನನ್ನ ಆತ್ಮೀಯರ ಬಳಿ  
ಮರೆತೆ ಹೋಯಿತು ನನ್ನಯ ಅನಾರೋಗ್ಯದ ಚಳಿ

ಪರೀಕ್ಷೆಯ ಒತ್ತಡ ಬಂದರು ಸ್ನೇಹದಲ್ಲಿ ಶಾಂತಿ  
ಮಾಸ್ಟರ್ಸ್ ಮಾತಿನಲ್ಲಿ ಜೀವನದ ಜ್ಞಾನ ಕಾಂತಿ  
ನಗು ನಲಿವು ಬೆರೆತು ಜೀವನ ಸಗುತ  
ನೆನಪಿನ ಪುಸ್ತಕಳು ಚಿನ್ನದ ಪದಗಳಾಗುತ್ತಾ

ಕೊನೆಯ ದಿನದ ವಿದಾಯದಲ್ಲಿ ಕಣ್ಣೀರು ಹರಿದು  
ನಗುವು ನಿರ್ಮಲ ಮನದಾಳದಲ್ಲಿ ತುಂಬಿನಿಂದು  
ಬೇರ್ಪಟ್ಟರು ಸ್ನೇಹದ ಹಾದಿ ಶಾಶ್ವತವಾಗಿ ಉಳಿದು  
ಕಾಲೇಜು ದಿನಗಳು ಬಾಳಿಗೊಂದು ಬಂಗಾರದ ಗುರುತು

KAVITHA

## ಮನದ ಮೌನದ ಮಿತ್ರ

ಒಂದೇ ಹಾದಿಯ ಹೆಜ್ಜೆಯಂತೆ,  
ಸ್ನೇಹಿತನು ನಗುವ ಸ್ಪೂರ್ತಿಯಂತೆ,  
ಕಣ್ಣಲ್ಲಿ ಕಂಡ ಕನಸಿನಂತೆ  
ಬಾಳಲ್ಲಿ ಅರಳಿದ ಬೆಳಕಿನಂತೆ

ಅಪ್ಪನಂತೆ ಬಿದ್ದಾಗ ಕೈ ಹಿಡಿದು ಎಬ್ಬಿಸಿದವನು  
ತಾಯಿಯಂತೆ ಮೌನದಲ್ಲೇ ತಾಳ್ಮೆ ತುಂಬಿದವನು  
ಜೀವನದ ಕತ್ತಲೆಗೆ ಬೆಳಕಾದವನು  
ಬಾಳೆಂಬ ಹಾಡಿಗೆ ಸಂಗೀತವಾದವನು

ಗಾಳಿ ಬಿಸಿಲಿನಲ್ಲಿ ನೆರಳಾಗಿ ನಿಂತ ಮರದಂತೆ  
ಹಾದಿಯ ಮಾಧ್ಯ ದಾರಿ ತೋರಿಸುವ ದೀಪದಂತೆ  
ದೀರ್ಘ ಪ್ರಯಾಣದಲ್ಲಿ ನೀರು ತುಂಬಿದ ಲೋಟದಂತೆ  
ಅವನ ಮಾತು ಮನಸಿಗೆ ಆರಾಮ ಕೊಡುವಂತೆ

DEEKSHA B DEVADIGA



# The Importance of Cybersecurity

In today's world, the internet is like a lifeline. We use it for almost everything sending money, shopping for groceries, watching movies, attending classes, talking to friends, and even working from home. It's hard to imagine a day without checking our phones or logging onto a computer. This kind of convenience is amazing, but it also opens the door to risks we don't always see coming. Every time we enter personal information online, whether it's our bank details, passwords, or even just our location, we're putting that data out into a space where it can be stolen, misused, or even sold. That's where cybersecurity comes in.

Cybersecurity might sound like a term only computer experts or tech companies use, but in reality, it affects every single one of us. It's the practice of protecting our devices, networks, and personal data from things like hacking, identity theft, scams, and viruses. Think of it like locking the doors and windows of your house before going to bed. You're not expecting someone to break in, but you still take precautions just in case. Cybersecurity is the digital version of that same common sense.

As more people move their lives online using apps to pay bills, storing files in the cloud, or even just sharing photos on social media, the need for strong online protection is growing fast. And along with that, the demand for professionals who understand how to build secure systems and respond to threats is also increasing. But here's the thing you don't need to be an expert to play a role in keeping the internet safe. In fact, every single internet user can help, just by being more aware and careful.

Simple actions can make a big difference. For example, using strong and unique passwords instead of something like "123456" can help keep your accounts safe. Updating your apps or computer software might seem annoying, but those updates often fix holes that hackers are looking for. Being cautious about clicking on links, especially in strange emails or messages, can protect you from scams that are designed to steal your information.

Cybersecurity isn't just about technology. It's also about habits and awareness. Just like we teach children to look both ways before crossing the street, we all need to learn some basic rules for staying safe online. It's about creating a digital world where people can trust the systems they use and feel confident that their personal information is protected.

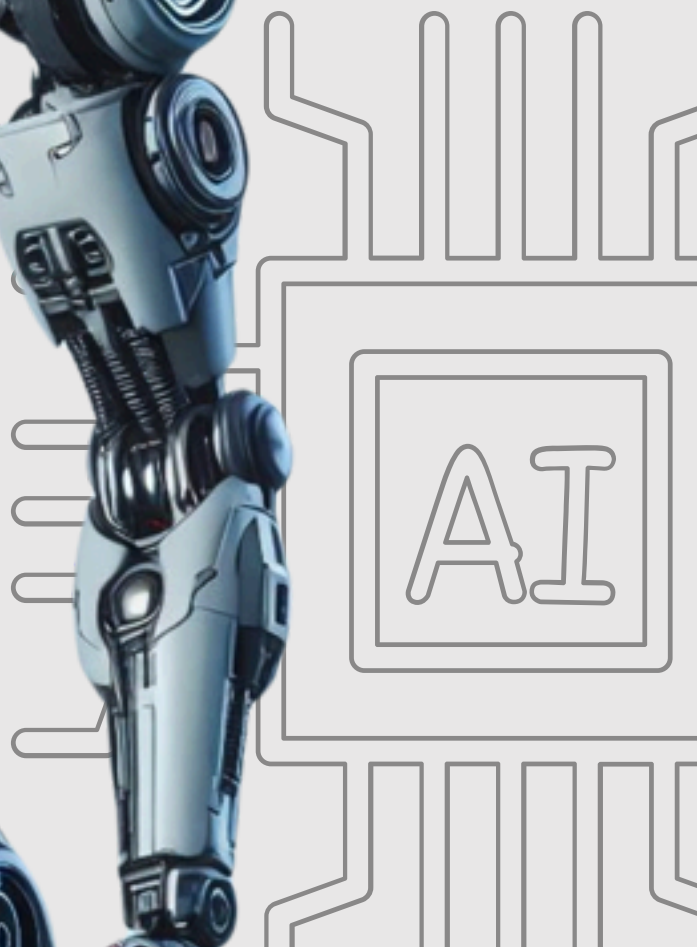
In the end, cybersecurity is not just a job for professionals. It's something we all need to care about. Whether you're a student, a parent, a business owner, or just someone who enjoys browsing the web, being smart and careful online is one of the best things you can do. Because staying safe online doesn't mean being scared it just means being prepared.

CHAITHANYA





# Student Showcase





# RECENT TRENDS IN CYBERSECURITY AND BLOCKCHAIN TECHNOLOGY



## Executive Summary:

This document outlines the major, recent trends in cybersecurity and blockchain technology as of August 12, 2025. It summarizes key developments, practical implications for organizations, and recommended actions for security teams and technology leaders.

1. Attackers are increasingly using AI to automate reconnaissance, create highly convincing phishing and social engineering campaigns, and uncover exploitable patterns with greater speed and scale. In response, defenders are turning to AI-powered detection, behavioral analytics, and automated response playbooks to keep pace and strengthen their defenses.

2. Identity and credential focused attacks  
Credential harvesting, account takeover, and supply of stolen credentials to the underground economy remain primary initial access vectors; identity protection and robust privilege management are core priorities.

3. Zero Trust & resilience Organizations are shifting from perimeter defense to zero-trust architectures combined with resilience planning, tabletop exercises, and preparations for business continuity during breach events.

4. Cloud-native and software supply chain risks remain a serious concern, with misconfigurations, unchecked permission sprawl, and increasingly sophisticated attacks exposing critical vulnerabilities. These issues continue to pose persistent, high-impact threats to organizations operating in modern cloud environments.

5. Human factor & security culture Phishing and social engineering succeed because of human weakness; regular, role-specific training and simulated phishing programs remain essential.

6. Nation-state activity and critical infrastructure targeting Geopolitical tensions and state-sponsored threats have increased attention on critical infrastructure, OT security, and public-private information sharing.

7. Preparing for quantum threats While still emerging, organizations and cryptographic communities are planning for quantum-resistant algorithms and migration strategies.



1.Layer-2 scaling and UX improvements Layer-2 solutions and rollups are widely adopted to reduce fees and improve throughput, improving consumer-grade UX for decentralized apps.

2.Tokenization of real world assets (RWA) Security tokens and tokenized real estate, commodities, and financial instruments are gaining traction for fractional ownership and settlement efficiencies.

3.DeFi evolution and regulation Decentralized Finance continues to innovate (advanced automated market-making, composability), while regulators are increasingly clarifying rules, especially around centralized on-ramps and broker reporting.

4.Interoperability & cross chain primitives Cross-chain bridges, messaging layers, and composable protocols are accelerating multi-chain integration while raising security considerations.

5. AI + smart contracts AI is being used to generate smarter, adaptive contracts and to audit/monitor contract behavior; some projects explore AI agents that interact with on chain systems

6.Governance models & DAOs DAOs and decentralized governance experiments are expanding to coordinate community-run projects, though legal and operational maturity vary.

7.Sustainability and energy-aware chains Environmental concerns and efficiency improvements (proof-of-stake, novel consensus) are a focus for new blockchains and upgrades.

8.Enterprise adoption & BaaS Enterprises are employing permissioned networks, blockchain-as-a-service offerings, and selective decentralization for supply-chain provenance, identity, and settlement use cases.

## Implications & Recommendations

For Security Teams: - Integrate AI-based detection and automate repetitive tasks to free analysts for higher order decisions.

- Prioritize identity security: MFA, passwordless options, dynamic authorization, and credential monitoring.
- Adopt Zero Trust principles incrementally and validate resilience with exercise-driven preparedness.
- Harden cloud posture with least-privilege, continuous configuration scanning, and runtime protection.
- For Technology and Product Leaders (Blockchain): Evaluate Layer-2 options and UX implications before migrating users; invest in cross-chain security audits.
- Consider tokenization pilots for high-liquidity, regulatory-friendly assets; engage compliance teams early.
- Monitor the regulatory landscape closely; design systems that can adapt to KYC/AML and reporting needs.
- Use permissioned chains or hybrid models for sensitive enterprise data while exploring public chains for broader interoperability.

NIKHIL K



# DECODING LIFE

**A JOURNEY THROUGH ZOOLOGY – PAST, PRESENT, AND FUTURE**

## **INTRODUCTION :**

Zoology, the scientific study of the animal kingdom, is a captivating field that unravels the intricate tapestry of life on Earth. From the single celled protozoa to the complex mammals, zoology explores the diversity, evolution, behavior, and ecology of animals, offering profound insights into the natural world and our place within it. This article delves into the fascinating realm of zoology, highlighting its historical roots, current advancements, and the critical role of environmental factors in shaping animal life.

## **A Look Back:**

**Tracing the History of Zoology** The fascination with animals is as old as humanity itself. Early humans relied on keen observation of animal behavior for hunting, survival, and understanding their surroundings. Formal zoological studies began to emerge with ancient civilizations. Aristotle, the renowned Greek philosopher, meticulously described numerous animal species and laid the groundwork for classification. Later, figures like Pliny the Elder in the Roman era compiled extensive, though sometimes anecdotal, accounts of animals.

The Age of Exploration in the 15th and 16th centuries brought a surge in the discovery of new species, fueling the need for more systematic approaches. The 18th century witnessed the groundbreaking work of Carl Linnaeus, who developed the binomial nomenclature system for classifying organisms, a cornerstone of modern taxonomy.



**DECODING LIFE:  
UNDERSTANDING  
ANIMALS ACROSS  
TIME**





### **The Present Landscape:**

The 19th century marked a turning point with Charles Darwin's theory of evolution by natural selection. This revolutionary idea provided a unifying framework for understanding the relationships between different animal groups and how they change over time. Paleontology, the study of fossils, further enriched our understanding of extinct animal forms and evolutionary lineages.

**Diverse Fields within Zoology** Modern zoology is a vast and multidisciplinary field encompassing numerous specialized areas:

#### **Taxonomy and Systematics:**

Focuses on the classification and evolutionary relationships of animals, using morphological, genetic, and molecular data.

#### **Physiology:**

Investigates the internal functions of animal bodies, including organ systems, cellular processes, and biochemistry.

#### **Ecology:**

Studies the interactions between animals and their environment, including population dynamics, community structure, and ecosystem functioning.

#### **Genetics:**

Explores the inheritance of traits and the genetic basis of animal diversity and evolution.

#### **Developmental Biology:**

Studies the processes by which animals grow and develop from embryos to adults.

### **The Environment's Influence**

The environment plays a profound role in shaping the traits and relationships of animals. Natural selection, the driving force of evolution, favors individuals with traits that enhance their survival and reproduction in a particular environment. This leads to adaptation, the process by which populations evolve to become better suited to their surroundings.

- Consider the camouflage of a chameleon blending into its leafy habitat or the thick fur of Arctic animals providing insulation against extreme cold. These are examples of morphological adaptations shaped by environmental pressures.



Similarly, behavioral adaptations, such as the migration of birds to find food or the complex social structures of ant colonies, are crucial for survival in specific environments.

- The environment also dictates the relationships between different animal species. Predator-prey dynamics, competition for resources, and symbiotic partnerships are all influenced by the availability of food, shelter, and other environmental factors. Changes in the environment, whether natural or human-induced, can have significant impacts on these relationships and the overall stability of ecosystems. Climate change, for example, is altering habitats, disrupting migration patterns, and threatening the survival of numerous animal species worldwide.

### **The Future of Zoology:**

- Zoology in the 21st century faces critical challenges, primarily driven by human activities. Habitat destruction, pollution, overexploitation of resources, and climate change are causing unprecedented rates of biodiversity loss. Zoological research is now more crucial than ever in understanding these impacts and developing effective conservation strategies.

- Emerging technologies, such as genomics, remote sensing, and artificial intelligence, are providing new tools for studying animal populations, monitoring their behavior, and understanding the complex interactions within ecosystems. Zoologists are actively involved in efforts to protect endangered species, restore degraded habitats, and promote sustainable coexistence between humans and wildlife.

### **Conclusion**

- By understanding the intricate web of life through the lens of zoology, we gain a deeper appreciation for the natural world and our responsibility to protect it for future generations. The journey of zoological discovery continues, promising further insights into the fascinating world of animals and their vital role in the planet's delicate balance



**NIDARSH CK**



# BEYOND AUTOMATION : The Rise of Industry 5.0

“Where human creativity meets machine intelligence to shape a sustainable future”



In the factories and offices of tomorrow, humans and machines will not compete they will co-create.

Industry 4.0 ushered in a new age of smart factories, robotics, AI-driven analytics, and connected devices. It revolutionized efficiency and precision, but often at the cost of sidelining something irreplaceable the human touch.

Industry 5.0 is here to change that narrative. This is the era of human-machine collaboration a future where technology handles the repetitive, dangerous, and data-heavy work, while humans bring the creativity, empathy, and strategic thinking that no algorithm can replicate.

## From Automation to Collaboration:

If Industry 4.0 was about automation, Industry 5.0 is about collaboration. In this new industrial paradigm, advanced technologies like artificial intelligence, the Internet of Things (IoT), blockchain, robots (collaborative robots), and digital twins are not replacing humans — they are empowering them. The mission is clear: build systems that are sustainable, resilient, and deeply human-centric

## Key Technologies Driving Industry 5.0:

**Artificial Intelligence (AI):** Assists humans in analyzing massive data sets, predicting trends, and making informed decisions faster.

**Internet of Things (IoT):** Connects devices and systems for real-time data exchange, improving responsiveness and personalization.

**Blockchain:** Ensures trust, transparency, and security in supply chains and transactions.

**Cobots (Collaborative Robots):** Work safely alongside humans on factory floors, adapting to human pace and input.

**Digital Twins:** Virtual replicas of systems or products for testing, simulation, and optimization before real world implementation. Real World Impact.

**Manufacturing:** Picture robots intricate products while designers personalize details to match each customer's exact style and needs.

**Smart Cities:** Data-driven systems optimize energy use, traffic flows, and waste management all while keeping citizen well-being at the center of decision-making.

**Sustainability:** Factories powered by renewable energy, production processes that waste nothing, and manufacturing methods that balance efficiency with environmental care.

**Healthcare:** Imagine a surgeon whose precision is enhanced by AI-powered robotics, delivering outcomes that neither human skill nor machine precision could achieve alone.

## Opportunities for the Next Generation:

Industry 5.0 is opening the door to careers that didn't exist a decade ago:

Human-machine interface design

AI ethics and governance

Sustainable engineering

Innovation leadership

The skills that will matter most are not just technical. Creativity, adaptability, cross-disciplinary thinking, and problem-solving will be essential to thrive in this hybrid human-machine era.

## The Human Touch in a Digital Era!

Even the most advanced machines need the guidance of the most remarkable processor ever built: the human brain. Industry 5.0 is more than a technological shift; it's a cultural movement. It reminds us that technology should be a partner — not a replacement — for human ingenuity. The future is being built right now.



# Muscle Myths vs. Protein Facts



The world of fitness is full of advice, tips, and trends some backed by science, others less so. Understanding the facts about protein and common gym myths helps students train smarter, eat better, and avoid unnecessary mistakes.

## Protein: Power with Purpose

Protein is the body's building block. It repairs muscles, supports recovery, and maintains overall health.

### Sources:

**Natural:** Eggs, dairy, chicken, fish, legumes, nuts, seeds.

**Supplements:** Whey, casein, plant-based powders.

### Benefits:

- Supports muscle repair and growth
- Keeps you full, aiding weight management
- Speeds recovery after workouts
- Boosts metabolism

### Possible Side Effects of Overconsumption:

- Kidney strain if intake is excessively high
- Digestive issues like bloating or constipation
- Nutrient imbalance if other foods are neglected
- Risk of low-quality supplements containing additives

**Tip:** Follow recommended intake (0.8–1.6 g/kg body weight) and combine protein with balanced meals, rather than relying solely on powders.



## Gym Myths Busted

1. **Lifting Makes Women Bulky** Women naturally have lower testosterone levels, so strength training leads to a toned, lean physique not excessive bulk.
2. **Sweat = Fat Loss** Sweat is the body cooling itself, not an indicator of calories burned. Workouts burn calories even without heavy perspiration.
3. **No Rest Days = Faster Results** Muscles grow during rest. Overtraining can slow progress and increase injury risk.
4. **Crunches Will Burn Belly Fat** Targeted exercises like crunches cannot selectively reduce fat in one area. Fat loss is a full-body process influenced by genetics.
5. **More Protein = More Muscle** Extra protein does not automatically increase muscle mass; the body only uses what it needs.



## Quick Fitness Tips

**Prioritize proper form over lifting heavier weights**

**Include rest days for recovery and muscle growth**

**Maintain consistency rather than relying on intensity alone**

**Combine balanced nutrition with training for sustainable results**

ADITHI D AMIN



# The Last Line of Code

Riya was the kind of student who loved late nights not for parties, but for debugging. On the night before her final-year project submission, she sat in the lab, eyes burning from hours of staring at the screen. Her IoT-based healthcare system worked... almost. One tiny bug kept it from running perfectly.

Her friends had gone home, the lab lights flickered, and she could hear the rain outside. She thought of giving up, but then remembered something her professor once said:

"A bug isn't the end of the program, it's the start of understanding it better."

Fueled by determination (and cold coffee), she kept going. At exactly 3:14 AM, the console finally displayed: Execution Successful.

Riya didn't just submit a project that day she submitted proof to herself that persistence wins over panic.

Later, when her project was actually deployed in a local clinic to help monitor patients remotely, she realized something:

In coding, just like in life, the last line you write might be the one that changes everything.

Shraddha VT

## Simple Truth About Happiness

Many people think happiness is something big and exciting — like getting a new job, falling in love, or going on a dream holiday. Those moments can make us happy, but they don't last forever. Real happiness is usually quiet and simple. It's like a small light inside us that keeps glowing, even on normal days. Life is not always smooth. There will be problems, changes, and times when things feel heavy. If we keep waiting for everything to be perfect before we feel happy, we might wait forever. Happiness is not something we find only in special moments — it can be found in small, everyday things. It could be the smell of fresh rain, a warm cup of tea on a cold morning, or hearing your favorite song. It could be laughing with a friend, finishing a small task you were avoiding, or watching the sunset without looking at your phone.

A mistake many people make is thinking, "I'll be happy when..." — when I earn more money, when I look better, when I finally have the life I want. But happiness is not a reward we get later. It's something we can choose now. It's about noticing the good things, even if they are small, and letting them matter to us. Life will always have problems. We can't stop the rain, but we can still enjoy a cup of coffee while it falls. We can still laugh with someone we love. We can still feel thankful for the good things we have right now. Maybe the real secret to happiness is this: look for it in the little things, don't wait for it to be perfect, and remember that even on hard days, there is still something worth smiling about.



# FROM SHADOW TO TRANSPARENCY



Organ trafficking is one of the most alarming forms of organized crime in the world today. According to the World Health Organization, thousands of illegal organ transplants occur every year, often exploiting vulnerable populations and bypassing legal and ethical safeguards. The lack of transparency in organ donation systems, weak verification processes, and inefficient record-keeping make it easier for black-market networks to operate. To combat this issue, innovative technologies such as blockchain are now being explored as potential solutions.

## The Problem with Current Systems :

Traditional organ donation systems depend on centralized databases managed by hospitals or government agencies. While these systems are meant to ensure fairness and safety, they can be susceptible to human error, data manipulation, and corruption. In some regions, falsified donor information, tampered medical records, and untraceable transactions allow traffickers to exploit loopholes. Furthermore, patients in desperate need of organs may unknowingly become victims of illegal practices.

## Why Blockchain?

Blockchain is a decentralized and tamper proof digital ledger technology. Every record (or “block”) is securely linked to the previous one, making it nearly impossible to alter past data without detection. This inherent transparency and security make it an ideal candidate for use in sensitive and life-critical areas like organ donation and transplantation.

## How Blockchain Can Help

**-Transparent Donor-Recipient Matching:** Donor and recipient details can be stored on a blockchain network in encrypted form. Only authorized medical professionals can access the information, ensuring privacy while preventing unauthorized changes.

**-Immutable Medical Records:** Once donor eligibility, consent, and medical history are recorded, the data cannot be altered or forged. This prevents false documentation.

**-Real-Time Tracking:** The entire journey of an organ—from donor hospital to transplant center—can be tracked and verified through blockchain. This ensures that organs are not diverted to illegal markets.

**-Smart Contracts:** Automated smart contracts can trigger actions such as notifying hospitals when a matching organ is available, while ensuring compliance with legal guidelines.

**-Global Collaboration:** Blockchain networks can connect hospitals and registries worldwide, making cross border organ donations more transparent and accountable.

## Potential Benefits

**Increased Trust:** Patients, donors, and medical institutions can have greater confidence in the fairness of the system.

**Reduction in Fraud:** Tamper-proof records make illegal transactions extremely difficult.

**Efficiency:** Faster matching and reduced paperwork can save critical time in life-saving procedures.

**Accountability:** Every step in the organ transfer process is recorded, allowing for audits and investigations if needed.



### **Challenges Ahead :**

While blockchain offers promising solutions, challenges remain. Implementing such systems requires substantial investment, technological expertise, and legal adaptation. Ensuring global adoption would also mean harmonizing medical and data protection laws across countries. Furthermore, the success of blockchain in organ trafficking prevention depends on cooperation between governments, healthcare providers, and technology developers.

### **Conclusion**

Organ trafficking is a grave humanitarian issue, but with the right technology, its impact can be significantly reduced. Blockchain provides a pathway toward a transparent, secure, and fair organ donation ecosystem. By ensuring data integrity, enabling real-time tracking, and fostering trust among stakeholders, blockchain has the potential to transform the way organ transplantation is managed—ultimately saving countless lives while shutting down illegal networks.

DEEKSHA L J

## **5G and the Road to 6G: Transforming Connectivity**

The evolution of mobile networks has reshaped society—from 1G voice calls to 4G video streaming. Today, 5G is at the center of global digital transformation, and while its adoption continues, researchers are already preparing for the next milestone: 6G.

### **The Impact of 5G**

5G is more than just faster internet. With speeds up to 10 Gbps, latency under 1 millisecond, and the ability to connect millions of devices, it enables breakthroughs such as:

- **Telemedicine** with remote surgeries.
- **Smart factories** powered by IoT sensors.
- **Autonomous vehicles** communicating in real time.
- **Immersive entertainment** like AR/VR streaming.

### **The Vision for 6G**

Expected by 2030, 6G will redefine connectivity:

- Speeds up to 1 Tbps (100x faster than 5G).
- AI-driven self-optimizing networks.
- Latency below 0.1 ms, enabling brain-computer interfaces.
- Holographic communication and fully immersive digital worlds.

6G aims to merge physical and digital realities, powering smart cities, advanced robotics, and sustainable urban ecosystems.

### **The Global Race**

Nations and companies are competing to lead this revolution:

- South Korea, China, and the U.S. are investing billions in 6G R&D.
- Nokia, Samsung, Huawei, and Qualcomm are already developing prototypes.
- International collaboration will be vital for global standards.

### **Conclusion**

5G is transforming industries today, but 6G represents the future of human connectivity. It is not just about speed—it is about creating an intelligent, hyperconnected world where technology integrates seamlessly into everyday life. The road from 5G to 6G is the pathway to the next digital revolution.



# Beyond Algorithms: Why ChatGPT Can Never Replace Humans

Artificial Intelligence (AI) is advancing at lightning speed, making its way into almost every part of our lives. From voice assistants that remind us of tasks to systems that can draft emails, diagnose diseases, or predict financial markets, AI has shown us just how powerful machines can be. Among these breakthroughs, **ChatGPT** stands out as one of the most widely used tools—capable of generating essays, solving problems, writing code, and even mimicking creativity.

But here's the truth: **AI is not human**. For all its brilliance, ChatGPT cannot think, feel, or imagine the way we do. It may dominate certain tasks, but it can never replace the depth, emotion, and intuition of human beings. Let's explore why.

## What AI Does Well

- 1. Automating Tasks** AI shines at repetitive or data-heavy work. Whether it's handling customer queries, scanning medical images, or recommending videos, machines work quickly and tirelessly.
  - 2. Supporting Decisions** AI helps businesses and governments analyze huge sets of information to make smarter choices. For instance, banks use it to detect fraud, and doctors use it to catch early symptoms of diseases.
  - 3. Enhancing Daily Life** From navigation apps guiding us through traffic to personal assistants setting reminders, AI makes our routines smoother and more convenient.
  - 4. Boosting Productivity and Creativity** ChatGPT can generate ideas, draft documents, or help students with homework. It's a great support system when we need quick input or inspiration.
- These strengths make AI a valuable tool. But they don't make it human—and that's the key difference.

## Why ChatGPT Can't Replace Humans

- 1. Lack of True Creativity** ChatGPT can remix existing patterns of information, but it can't **imagine something truly original** the way humans can. A poem or story written by AI is clever, but it lacks the emotional depth that comes from lived experience.
- 2. Absence of Emotions** Humans feel joy, sorrow, empathy, and compassion. These emotions guide our decisions, our relationships, and our creativity. ChatGPT doesn't feel—it only generates responses that *sound* empathetic. Machines may mimic emotions, but they can't actually experience them.
- 3. Context and Judgment** AI is limited by the data it is trained on. It doesn't understand morality, cultural nuance, or complex ethical dilemmas. Humans can weigh consequences, values, and emotions before deciding—something no algorithm can replicate.
- 4. The Human Touch in Work** Teachers inspire, doctors comfort, writers stir emotions, and leaders motivate. While AI can provide information, it can't offer the **human connection** that builds trust and meaning. Imagine a classroom with only AI tutors—efficient, maybe, but cold and uninspiring.
- 5. Responsibility and Accountability** When a human makes a mistake, responsibility can be traced. When AI makes a mistake—say, giving false medical advice—who is accountable? At the end of the day, humans must remain in charge because only we carry ethical responsibility.

## Humans + AI: A Partnership, Not a Replacement

Instead of fearing replacement, we should view AI as a partner. ChatGPT and similar tools can handle routine or large-scale tasks, freeing humans to focus on what machines can't do:

- Dreaming up new ideas
- Building meaningful relationships
- Solving moral dilemmas
- Leading with empathy and wisdom

The future lies not in humans versus AI, but in humans with AI—where machines enhance our abilities without erasing our uniqueness.



## Conclusion

ChatGPT is powerful, smart, and useful but it is not human. It can generate words, but not wisdom. It can mimic empathy, but not feel it. It can analyze data, but not understand the beauty of life, culture, or love. AI will continue to dominate certain tasks, but it will never replace the human heart, mind, and spirit. As long as we remember what makes us unique, AI will remain a tool in our hands not a master of our future.

POORNACHANDRA S GOWDA

एक खुली किताब का आखिरी पन्ना आया,  
कहानी अधूरी सी, मगर खत्म होने का साया।

वो पहला दिन याद है, जब कॉलेज के दरवाज़े खुले,  
चेहरों का समंदर था, मगर अपनेपन के बुलबुले धुले।  
ना जाने कैसे घुलना-मिलना सीखा,  
वो अजनबी लोग, आज घर से भी करीबी निकले।

अब ये परिवार आगे बढ़ने को है मजबूर,  
कौन जाने कल किससे होगी कितनी दूर।  
क्या कभी फिर वो बोरिंग लेक्चर्स याद आएँगे?  
क्या उदास दोपहर की वो क्लासेज़ फिर बुलाएँगे?

क्या अब भी हममें हिम्मत होगी—  
इम्तिहान से एक दिन पहले पढ़ने की?  
क्या अब भी क्लास बंक करने की जुर्रत रहेगी,  
या ज़िन्दगी हमें सुबह जल्दी उठना सिखाएगी?

क्या फिर कभी बारिश में कंबल सिर तक खींचेंगे,  
क्या चार दीवारें हमें सच में याद आएँगी?  
क्या आखिरी बेंच की हँसी, बिना एसी की घुटन  
फिर कभी हमें रुला जाएगी?

क्या मैं सच में इंजीनियर बन गया हूँ,  
या बस ये सफ़र यहीं रुक गया है?  
दिल से पूछूँ तो लगता है—  
इंजीनियरिंग खत्म नहीं हुई... बस हम बड़े हो गए हैं।

PRAJWAL SHETTY S



# TOP DEVELOPMENT AND IT TOOLS YOU SHOULD KNOW IN 2025

"In technology, the difference between working hard and working smart often comes down to the tools you choose."

In today's fast-moving tech world, having the right tools at your fingertips can make all the difference. Whether you're building software, managing cloud infrastructure, handling data, or securing digital assets, the tools you choose can boost productivity, scale effortlessly, and keep everything safe. Below is a quick look at some of the most trusted and powerful tools used by professionals across software development, cloud computing, database management, and cybersecurity.

## 1. Visual Studio Code (VS Code)

**Type:** Free, Open-source code editor by Microsoft

**Website:** [code.visualstudio.com](https://code.visualstudio.com)

### Key Highlights:

- Intelligent code assistance with IntelliSense for auto-completion and parameter info.
- Integrated terminal and Git support for seamless version control.

### Best Use Cases:

- Front-end or full-stack development.
- Lightweight, flexible editing environment.



## 2. Docker

**Type:** Open-source containerization platform

**Website:** [docker.com](https://docker.com)

### Key Highlights:

- Containers package apps and dependencies for consistent deployment.
- Docker Hub provides thousands of pre-built images.

### Best Use Cases:

- Microservices architecture.
- DevOps workflows for consistent environments.
- Portable application deployment.

## 3. Kubernetes

**Type:** Open-source container orchestration platform

**Website:** [kubernetes.io](https://kubernetes.io)

### Key Highlights:

- Automated scaling, deployment, and rolling updates.
- Self-healing to maintain uptime.
- Built-in service discovery and load balancing.

### Best Use Cases:

- Complex microservices requiring scaling and high availability.
- Multi-cloud or hybrid deployments.
- Automated container management.





## 4. Node.js

**Type:** Open-source JavaScript runtime

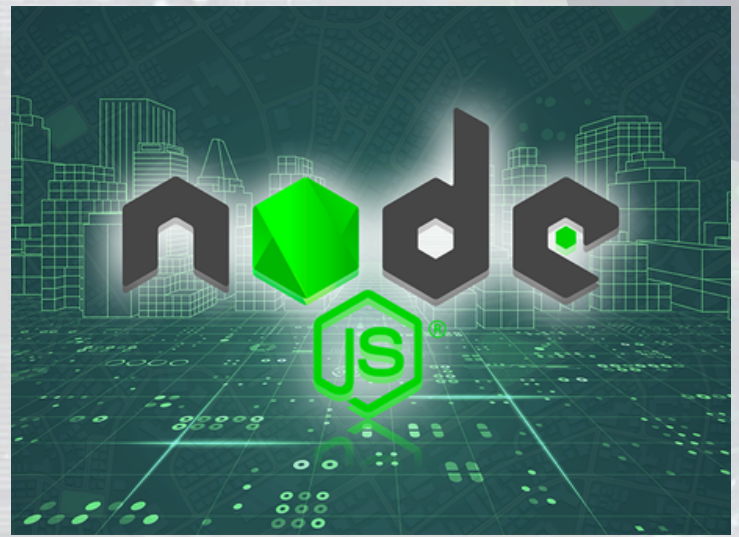
**Website:** [nodejs.org](https://nodejs.org)

**Key Highlights:**

- Asynchronous, non-blocking I/O for high performance apps.
- Single-threaded but highly scalable.
- Large ecosystem via NPM(Node Package Manager).

**Best Use Cases:**

- Real-time apps (chat, gaming).
- RESTful APIs and microservices.
- High-speed, scalable backend development.



## 5. LINUX

**Type:** Lowcode backend development and integration tool

**Website:** [linux.software](https://linux.software)

**Key Highlights:**

- Drag-and-drop development interface.
- Built-in integrations for databases, APIs, and services.
- Real-time debugging tools.

**Best Use Cases:**

- Rapid backend workflow automation.
- System integration projects.
- Data processing without heavy coding.

## 6. MySQL Workbench

**Type:** Visual database design and administration tool

**Website:** [mysql.com/products/workbench/](https://mysql.com/products/workbench/)

**Key Highlights:**

- Visual database modeling.
- SQL development with syntax highlighting.
- Comprehensive administration features.

**Best Use Cases:**

- Database schema design.
- MySQL server management.
- Unified database development and administration.



## 7. AWS (Amazon Web Services)

**Type:** Cloud computing platform

**Website:** [aws.amazon.com](https://aws.amazon.com)

**Key Highlights:**

- Elastic computing with EC2 and serverless Lambda functions.
- Global low-latency infrastructure.
- Wide range of specialized services for AI, ML, IoT, etc.

**Best Use Cases:**

- Scalable on-demand infrastructure.
- Global applications with low latency needs.





## 8. Wireshark

**Type:** Open-source network protocol analyzer

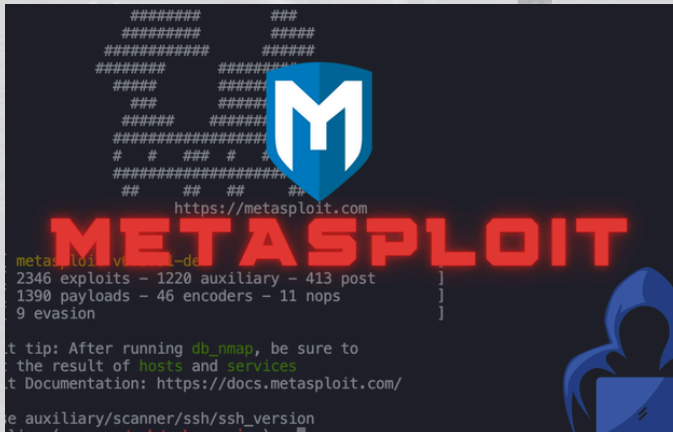
**Website:** [wireshark.org](https://www.wireshark.org)

### Key Highlights:

- Real-time packet capture and analysis.
- Works across Windows, Linux, macOS, and more.
- Supports multiple protocols and decryption formats.

### Best Use Cases:

- Network troubleshooting and optimization.
- Security assessments and vulnerability detection.
- Training in network protocols.



## 9. Metasploit

**Type:** Penetration testing framework

**Website:** [metasploit.com](https://www.metasploit.com)

### Key Highlights:

- Tests application, network, and server security.
- Detects vulnerabilities with precision.
- Compatible across multiple platforms.

### Best Use Cases:

- Cybersecurity testing and training.
- Infrastructure vulnerability assessments.
- Proactive defense planning.

## CONCLUSION:

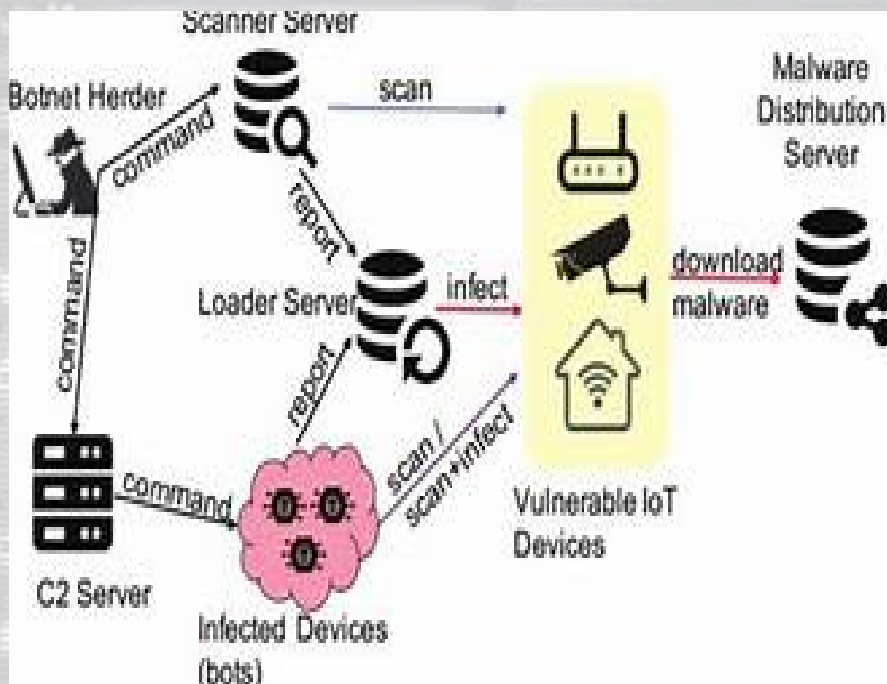
**"THE RIGHT TOOLS DON'T JUST MAKE THE JOB EASIER—THEY MAKE INNOVATION POSSIBLE."**

These tools span multiple domains—from coding and backend automation to cloud hosting and security testing—allowing developers, IT teams, and cybersecurity experts to work faster, smarter, and more securely. Whether you're building an app, deploying containers, managing databases, or safeguarding networks, adopting the right tools can significantly improve productivity and results.

**THUSHAR BALLAL**



# IoT Botnets: How Connected Devices Get Hijacked



## Introduction:

In today's world, the Internet of Things (IoT) connects billions of devices—from smart homes to healthcare systems—bringing convenience and automation. But this connectivity also creates new cybersecurity risks.

One major threat is IoT botnets—networks of hijacked devices controlled by cybercriminals. Many IoT devices are weakly secured, making them easy targets. Once compromised, they can launch massive DDoS attacks, spread malware, or disrupt critical infrastructure.

The rise of IoT botnets shows how even simple devices like cameras or routers can fuel global cyberattacks. This article explores how they work, their impact, and ways to protect our connected future.

## How IoT Botnets Work

IoT botnets exploit the vulnerabilities of smart devices to create powerful armies of compromised systems. Their functioning can be broken down into three main stages:

### Infection Process

Attackers often use default credentials like admin/admin or root/12345, which many users never change. Vulnerabilities in outdated firmware are exploited to gain unauthorized access. Open ports (Telnet, SSH, HTTP) provide entry points for remote code execution.

### Command & Control (C2) Servers

Once infected, devices communicate with an attacker-controlled C2 server. Instructions can be issued via IRC servers, HTTP APIs, or peer-to-peer networks, allowing attackers to manage large botnets remotely.

### Propagation Mechanism

An infected device actively scans for other vulnerable devices. Automated brute-force attacks are used to compromise new systems, allowing the botnet to grow rapidly and uncontrollably.

Automated brute-force attacks are used to compromise new systems, allowing the botnet to grow rapidly and uncontrollably.



## Technical challenges in Defending Against Iot Botnets

Protecting against IoT botnets is extremely difficult due to several limitations

- Many devices lack update mechanisms, making patching vulnerabilities nearly impossible.
- Weak authentication and outdated encryption expose devices to brute-force attacks.
- Insecure Iot protocols (MQTT, CoAP) transmit data with little or no security.
- Attackers often use fast-flux DNS and rotating IPs, making it hard to track and disable C2 servers.

## Detection and Prevention Techniques

Effective defense requires a combination of network-level monitoring and device-level security:

- Network-based detection: Monitor unusual outbound traffic patterns from IoT devices.
- Device hardening: Change default passwords, disable unnecessary services and ports.
- Firmware security: Apply regular updates and use signed firmware.
- Segmentation: Place IoT devices on separate VLANs to isolate them from critical systems.
- AI/ML-based anomaly detection: Helps detect unusual device behavior in large IoT networks.

## The Future of IoT Botnets

The risk of IoT botnets is expected to grow in coming years with 5G networks, billions of additional devices will come online, expanding the attack surface. Attackers are increasingly using AI driven automated attacks to spread faster and smarter. To counter this, governments and industry leaders emphasize “secure by design” policies, ensuring IoT devices are manufactured with built-in security features.

## Conclusion

IoT botnets represent one of the most pressing cybersecurity challenges of our digital age. With billions of smart devices already deployed and more being added daily, the threat is only intensifying. Combating these botnets requires a multi-layered approach from stronger device security and user awareness to industry-wide standards and international cooperation.

Ultimately, safeguarding the future of IoT will depend on collaboration between manufacturers, network administrators, and users to ensure that convenience does not come at the cost of global security.

**VAISHNAVI R D**



# ತುಳುನಾಡ ದೈವಾರಾಧನೆ

ಪರಶುರಾಮನ ಸೃಷ್ಟಿಯಾದ ನಮ್ಮ ಈ ತುಳುನಾಡಿನಲ್ಲಿ ದೈವಾರಾಧನೆಗೆ ಮಹತ್ತರವಾದ ಸ್ಥಾನವಿದೆ. ದೈವಾರಾಧನೆ ತುಳುನಾಡಿನ ಆರಾಧನೆಗಳಲ್ಲಿ ಅತ್ಯಂತ ಪ್ರಮುಖವಾದದ್ದು. ಈ ಆರಾಧನಾ ಪದ್ಧತಿಯು ಪ್ರಮುಖವಾಗಿ ಕರ್ನಾಟಕದ ದಕ್ಷಿಣ ಕನ್ನಡ, ಉಡುಪಿ ಜಿಲ್ಲೆಗಳಲ್ಲಿ ವಿಶೇಷವಾಗಿ ಕಂಡುಬರುತ್ತದೆ. ಇದು ಕೇವಲ ಒಂದು ಪೂಜಾ ವಿಧಾನವಾಗಿರದೆ, ತುಳುನಾಡಿನ ಜನರ ಸಾಮಾಜಿಕ, ಸಾಂಸ್ಕೃತಿಕ ಮತ್ತು ಧಾರ್ಮಿಕ ಬದುಕಿನೊಂದಿಗೆ ಹಾಸುಹೊಕ್ಕಾಗಿದೆ. ಈ ಸಂಪ್ರದಾಯದಲ್ಲಿ ದೈವಗಳು, ತಮ್ಮನ್ನು ನಂಬಿದವರಿಗೆ ರಕ್ಷಣೆ ಮತ್ತು ನ್ಯಾಯವನ್ನು ಒದಗಿಸುತ್ತವೆ ಎಂಬ ನಂಬಿಕೆ ತುಳುನಾಡಿನ ಜನರಲ್ಲಿದೆ. ದೈವಾರಾಧನೆಯು ತುಳು ಸಂಸ್ಕೃತಿಯ ಒಂದು ಅವಿಭಾಜ್ಯ ಅಂಗವಾಗಿದೆ. ದೈವಾರಾಧನೆಯ ಒಂದು ಪ್ರಮುಖ ಭಾಗವೆಂದರೆ ಕೋಲ ಅಥವಾ ನೇಮ. ಇದು ದೈವಗಳನ್ನು ಆಹ್ವಾನಿಸಿ ಪೂಜಿಸುವ ಒಂದು ವಿಧವಾದ ಆಚರಣೆಯಾಗಿದೆ. ದೈವಾರಾಧನೆಯಲ್ಲಿ ಸಾಮಾನ್ಯವಾಗಿ “16” ಕಟ್ಟುಕಟ್ಟುಗಳನ್ನು ಕಾಣಬಹುದು. ದೈವಾರಾಧನೆಯನ್ನು ಪಾಲಿಸುವ ಹಲವಾರು ಮಂದಿಗೆ ಅದರ ಕಟ್ಟುಕಟ್ಟುಗಳು ತಿಳಿದಿರುವುದಿಲ್ಲ. ಈ 16 ಕಟ್ಟು ಕಟ್ಟುಗಳು ಕೋಲ ಸೇವೆಯ ಆರಂಭದಿಂದ ಅಂತ್ಯದವರೆಗಿನ ಎಲ್ಲಾ ಕ್ರಮಗಳನ್ನು ಒಳಗೊಂಡಿದೆ. ಈ ಕಟ್ಟು ಕಟ್ಟುಗಳನ್ನು ತಿಳಿದುಕೊಳ್ಳುವುದು ಅತ್ಯಗತ್ಯ.

## ದೈವಾರಾಧನೆಯ ಕಟ್ಟು ಕಟ್ಟುಗಳು:

### 1. ಪಡಿಯಕ್ಕಿ ಕೊಡುವುದು



ಪ್ರಪಂಚಮವಾಗಿ ದೈವ ನರ್ತಕನನ್ನು ದೈವದ ಭತ್ತದ ಅಡಿಗೆ ಕರೆಯಲಾಗುತ್ತದೆ. ತದನಂತರ ಒಂದು ಪಡಿಯ ಮೇಲೆ ಕುಚ್ಚಲಕ್ಕಿಯನ್ನು ಹಾಕಿ ಅದರ ಮೇಲೆ ಒಂದು ತೆಂಗಿನಕಾಯಿಯನ್ನು ಇಟ್ಟು ಹಿರಿಯರು ಹಾಗೂ ಮನೆತನದವರ ದೈವ ನರ್ತಕನಿಗೆ ನೀಡಲಾಗುತ್ತದೆ.

### 2. ಎಣ್ಣೆ ಬೂಳು



ಪಡಿಯಕ್ಕಿ ಕೊಟ್ಟ ನಂತರ ದೈವ ಕರ್ತೃ (ಮುಕ್ಕಾಲ್ದಿ) ದೈವ ನರ್ತಕನಿಗೆ ವೀಳ್ಯದಲಿ ಹಾಗೂ ಅಡಿಕೆಯನ್ನು ಕೊಡುತ್ತಾನೆ. ತದನಂತರ ದೈವ ನರ್ತಕನು ಕೊಡುವ ತಟ್ಟಿಗೆ ಮೂರು ಬಾರಿ ಎಣ್ಣೆಯನ್ನು ಹಾಕುತ್ತಾನೆ. ಆ ಎಣ್ಣೆಯನ್ನು ಆತ ತನ್ನ ತಲೆಗೆ ಹಚ್ಚಿ ಸ್ನಾನ ಮಾಡಲು ಹೊರಡುತ್ತಾನೆ.



### 3.ಸಂಧಿ ಹೇಳುವುದು (ಪಾಡ್ವನ)



ಸ್ನಾನ ಮಾಡಿದ ನಂತರ ದೈವ ನರ್ತಕ ದೈವದ ಭತ್ತದ ಅಡಿಗೆ ಬಂದು "ತೆಂಬರೆ" ಬಾರಿಸುತ್ತಾ ದೈವಕ್ಕೆ ಸಂಬಂಧಿಸಿದ ಸಂದಿ ಪಾಡ್ವನವನ್ನು ಹೇಳುತ್ತಾನೆ. ತದನಂತರ ಬಣ್ಣಗಾರಿಕೆ(ಅರದಳ)ಗೆ ತೆರಳುತ್ತಾನೆ.

### 4.ಹೋಮ



ಈ ಕಟ್ಟಿನಲ್ಲಿ ದೈವದ ಕರ್ತೃ ಭತ್ತದ ನಡು ಭಾಗದಲ್ಲಿ ಬಾಳೆ ಎಲೆ ಹಾಕಿ ಅದರ ಮೇಲೆ ಹಲಸಿನ ಕೋಲಿನ ಹೋಮ ಇಡುತ್ತಾನೆ. ಈ ಪ್ರಕ್ರಿಯೆಯನ್ನು ಶುದ್ಧ ಮಾಡುವುದು ಎಂದೂ ಕರೆಯುತ್ತಾರೆ.

### 5.ಬಳೊಳಿ ಕಟ್ಟುವುದು



ಐದನೇ ಕಟ್ಟಿನಲ್ಲಿ ಮಡಿವಾಳ ಸಮುದಾಯ ಅಥವಾ ದೇವಾಡಿಗ ಸಮುದಾಯಕ್ಕೆ ಸೇರಿದ ವ್ಯಕ್ತಿ ದೈವದ ಭತ್ತದ ಮೇಲೆ ತೆಂಗಿನ ಗರಿಯಿಂದ ಮಾಡಿದ ಬಳೊಳಿಯನ್ನು ಕಟ್ಟುತ್ತಾನೆ.

### 6.ಬಲಿ ಇಡುವುದು



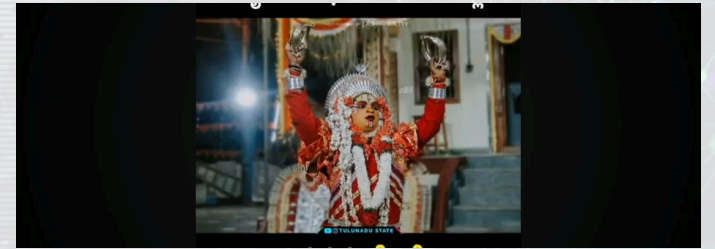
ಈ ಕಟ್ಟಿನಲ್ಲಿ ಭತ್ತದ ನಡು ಭಾಗದಲ್ಲಿ ಮರದ ಸ್ವಲ್ಪ ಇಟ್ಟು ಅದರ ಮೇಲೆ ಬಾಳೆ ದಿಂಡು ಹಾಗೂ ತೆಂಗಿನ ಗರಿಯಿಂದ ಮಾಡಿದ ವೃತ್ತಾಕಾರದ ಬಲಿಯ ಮೇಲೆ ಬೇಯಿಸಿದ ಅನ್ನ ಹಾಕಿ ಅದರ ಮೇಲೆ ದೀಪವನ್ನು ಇಡಲಾಗುತ್ತದೆ.

### 7.ಗಗ್ಗರ ಬೂಳ್ಯ



7ನೇ ಕಟ್ಟಿನಿಂದ ದೈವ ನರ್ತನ ಪ್ರಾರಂಭವಾಗುತ್ತದೆ. ಬಲಿಯ ಮುಂಭಾಗದಲ್ಲಿ ನೆಲದ ಮೇಲೆ ಬಾಳೆ ಎಲೆ ಹಾಕಿ ದೈವದ ಗಗ್ಗರ ಹಾಗೂ ಒಂದು ಎಲೆಗಂಧ ಇಡಲಾಗುವುದು.

### 8.ಗಗ್ಗರ ಸೇವೆ



ದೈವ ನರ್ತಕ ಬಣ್ಣಗಾರಿಕೆ ಎಲ್ಲವನ್ನು ಮುಗಿಸಿ ಸಂಪೂರ್ಣ ತಯಾರಾದ ನಂತರ ದೈವ ಭತ್ತದ ಅಡಿಗೆ ಬಂದು ಗಗ್ಗರ ಬೂಳ್ಯವನ್ನು ಸ್ವೀಕರಿಸುತ್ತಾನೆ. ಗುತ್ತಿನವರಿಗೆ, ಹಿರಿಯರಿಗೆ, ಸೇರಿದ ಜನರಿಗೆ ಹಾಗೂ ಮನೆಯವರಿಗೆ ಗಗ್ಗರ ಸೇವೆಯ ಮೂಲಕ ಅನುಗ್ರಹ ನೀಡಲಾಗುತ್ತದೆ.

### 9.ಬದಿಕಾರಾದ ಬಲಿ



ಈ ಕಟ್ಟಿನಲ್ಲಿ ದರ್ಶನದ ಪೂಜಾರಿ ತೆಂಗಿನಕಾಯಿ ಹಾಗೂ ದೈವದ ಗಂಧದ ಎಲೆಯನ್ನು ಹೊಂದಿರುವ ಮಡಿಕೆಯನ್ನು ಮುಚ್ಚಿ ಅದನ್ನು ಬಾನೆತ್ತರಕ್ಕೆ ಏರಿಸುತ್ತಾ ಕುಣಿಯುತ್ತ ದೈವದೊಂದಿಗೆ ಬಲಿ ಬರುತ್ತಾನೆ.

### 10.ಬದಿಕಾರದ ಬೂಳ್ಯ



13ನೇ ಕಟ್ಟಿನ ನಂತರ ದೈವವು ಮಡಿಕೆಯನ್ನು ತೆಗೆದುಕೊಳ್ಳುತ್ತದೆ ಹಾಗೂ ಅದನ್ನು ಬಿಡಿಸಿ ಕೆಲವೊಂದು ನುಡಿಕಟ್ಟನ್ನು ಕೊಡುತ್ತದೆ. ದೈವವು ಮಡಿಕೆಯಿಂದ ಅಮೃತವನ್ನು ತೆಗೆದು ಊರಿನ ಪರ ಊರಿನ ಭಕ್ತರಿಗೆ ಕುಟುಂಬದವರಿಗೆ ಕೊಡುತ್ತದೆ ಹಾಗೂ ವಿಷವನ್ನು ಗರುಡನ ಬಾಯಿಗೆ ಹಾಕುತ್ತದೆ.

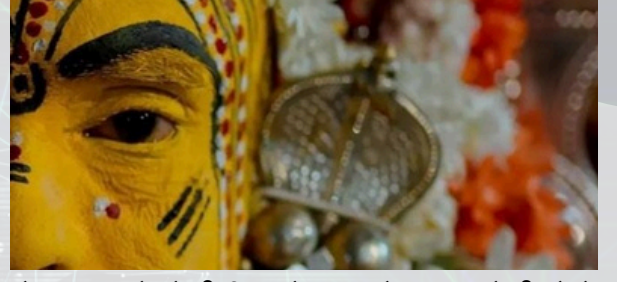


## 11.ಹಾಲು ಕೊಡುವುದು



ಬಂದಂತಹ ಭಕ್ತರಿಗೆ ಹಾಗೂ ಕುಟುಂಬದವರಿಗೆ ನುಡಿ ಕೊಟ್ಟ ನಂತರ ದೈವವು ಕುಟುಂಬದ ಮನೆಗೆ ತೆರಳುತ್ತದೆ. ಕುಟುಂಬದ ಮನೆಯಲ್ಲಿ ದೈವಕ್ಕೆ ಹಾಲು ಹಾಗೂ ಬಾಳೆಹಣ್ಣನ್ನು ನೀಡಲಾಗುತ್ತದೆ. ದೈವವು ಸಂತೋಷದಿಂದ ಕೆಲವೊಂದು ನುಡಿಯನ್ನು ಕುಟುಂಬದವರಿಗೆ ಹೇಳುತ್ತದೆ. ಇಲ್ಲಿಗೆ ದೈವದ ಕೋಲ ನಡೆಸುವ ಸಂಪ್ರದಾಯದ ಮೂಲ ಕರ್ತವ್ಯ ಮುಗಿದಂತೆ.

## 12.ಪಿರಿ ಕಟ್ಟು



ಕುಟುಂಬದ ಮನೆಯಿಂದ ಹಿಂತಿರುಗಿ ಬಂದ ದೈವವು ಕುಟುಂಬದವರಿಗೆ ಮೂಲ ಪ್ರಸಾದವನ್ನು ನೀಡಿ ತನ್ನ ಬಿಂಬ ಸೇರುತ್ತದೆ. ನಂತರ ದೈವ ನರ್ತಕನು ಪ್ರಸಾದ ಪಡೆದು ಹಿಂತಿರುಗಿ ಬರುತ್ತಾನೆ. ತದನಂತರ 2ನೇ ಕಟ್ಟಿನಲ್ಲಿ ನೀಡಿದಂತಹ ಎಣ್ಣೆಯಿಂದ ಬಣ್ಣವನ್ನು ತೆಗೆಯುತ್ತಾನೆ.

## 13.ಜೀಟಿಕೆ ಹಿಡಿಯುವುದು



ಗಗ್ಗರ ಸೇವೆಯ ಕ್ರಮ ಮುಗಿದ ನಂತರ ಮದ್ಯಸ್ಥರು ದೈವದ ಹಿನ್ನೆಲೆಯನ್ನು ಹೇಳುತ್ತಾರೆ ಅದಕ್ಕೆ ಪೂರಕವಂತೆ ಸೇರಿದ ಭಕ್ತಾದಿಗಳು ಶ್ರದ್ಧೆಯಿಂದ , ಭಕ್ತಿಯಿಂದ ಹೂವಿನ ಎಸಳನ್ನು (ಪೂಅರಿ) ಎಸೆಯುತ್ತಾರೆ. ಈ ಕ್ರಮದ ನಂತರ ದೈವವು ಜೀಟಿಕೆಯನ್ನು ಹಿಡಿದು ಊರಿನ ಗ್ರಾಮ ದೇವರು, ಪರಿವಾರ ದೈವ ದೇವರುಗಳನ್ನು ಮಾಯದಲ್ಲಿ ಭೇಟಿಯಾಗುತ್ತದೆ. ಇದನ್ನು ಬೆಳಕು ಸೇವೆ ಎಂದೂ ಕರೆಯುತ್ತಾರೆ.

## 14.ಹೋಮ



ಹತ್ತನೇ ಕಟ್ಟು ಒಂದು ರೀತಿಯಲ್ಲಿ ವಿರಾಮದಂತೆ. ಇಲ್ಲಿ ದೈವ ನರ್ತಕ ತಾತ್ಕಾಲಿಕವಾಗಿ ಆರಾಮಿಸಲು ಹೋಗುತ್ತಾನೆ.ಈ ನಡುವೆ 4ನೇ ಕಟ್ಟಿನ ಹಾಗೆ ದೈವ ಕರ್ತೃ ಹೋಮ ಇಡುತ್ತಾನೆ.

## 15. ಮಾನೆಚ್ಚಿ(ಮಾನಿ ದರ್ಶನ)



ಬಿಲ್ಲವ ಸಮುದಾಯಕ್ಕೆ ಸೇರಿದ ದರ್ಶನದ ಪೂಜಾರಿ ಈ ಕಟ್ಟನ್ನು ಮಾಡುತ್ತಾರೆ.ಇಲ್ಲಿ ಸ್ವಲ್ಪ ಪ್ರಮಾಣದ ದೈವ ಸಂದರ್ಶನವೂ ಆಗುತ್ತದೆ. 30 ನಿಮಿಷದೊಳಗೆ ಈ ಕ್ರಮವು ಮುಕ್ತಾಯವಾಗುತ್ತದೆ.

## 16.ಅಣಿ ಕಟ್ಟುವುದು



ವಿರಾಮಕ್ಕೊಂದು ಹೋದ ದೈವನರ್ತಕ ವಿರಾಮ ಮುಗಿಸಿ ಬೆನ್ನಿಗೆ ಅನಿ ಮತ್ತು ಮಡಲಿಗೆ ಮಡಲ ಅಣಿ ಕಟ್ಟಿ ಬರುತ್ತಾನೆ. ತಲೆಯ ಮೇಲೆ ದೈವದ ಮುಖವಾಡವನ್ನು ಕಟ್ಟಲಾಗುತ್ತದೆ. ತದನಂತರ ದರ್ಶನದ ಪೂಜಾರಿ ತನ್ನ ಕೈಯಲ್ಲಿದ್ದ ಆಯುಧವನ್ನು ದೈವ ನರ್ತಕನಿಗೆ ಕೊಡುತ್ತಾನೆ.



# ಸಮುದ್ರ ತೀರದ ಮುತ್ತು ಕುಂದಾಪುರ



ಧಾರ್ಮಿಕ ಜಗತ್ತಿಗೆ ಸಂಸ್ಕಾರವನ್ನು ಒದಗಿಸುವುದರಲ್ಲಿ ಕುಂದೇಶ್ವರಪುರ ಜಗತ್ಪ್ರಸಿದ್ಧ. ಹೌದು ಅದೊಂದು ಕಾಲ ಸುಮಾರು 10ತನೇ 11ನೇ ಶತಮಾನದ ಶ್ರೇಷ್ಠ ದೊರೆಯಾದಂತ ಕುಂದವರ್ಮ ತನ್ನ ಧಾರ್ಮಿಕ ನಿಷ್ಠೆ , ರಾಜ್ಯದ ರಕ್ಷಣೆ , ಸಾಂಸ್ಕೃತಿಕ ಕೇಂದ್ರ ಪಟ್ಟಣಕ್ಕೆ ಗುರುತು ನೀಡುವ ಸಲುವಾಗಿ ಕುಂದೇಶ್ವರ ಎಂಬ ದೇವಾಲಯವನ್ನು ನಿರ್ಮಿಸುತ್ತಾರೆ ಅಂತೆಯೇ ಊರು ಕುಂದಾಪುರ ಎಂದು ಹೆಸರುವಾಸಿ ಆಯಿತು.

ಕುಂದಾಪುರವು ಕರ್ನಾಟಕ ರಾಜ್ಯದ ಉಡುಪಿ ಜಿಲ್ಲೆಯಲ್ಲಿರುವ ಒಂದು ಪ್ರಸಿದ್ಧ ಪಟ್ಟಣ ಇದು ಅರೇಬಿಯಾ ಸಮುದ್ರದ ತೀರದಲ್ಲಿದ್ದು ,ಹಸಿರಿನ ಪರಿಸರ , ಎಲ್ಲಕ್ಕಿಂತ ಮಿಗಿಲಾಗಿ ಪದೆ ಪ್ರಯೋಗವು ಸುಂಕು ಮಾರ್ಗವಾದ ಕಾರಣ ಐತಿಹಾಸಿಕ ಮಹತ್ವ ಪಡೆದು ಹೆಸರು ವಾಸಿಯಾಗಿದೆ

## ಭೌಗೋಳಿಕ ವೈಶಿಷ್ಟ್ಯ:

ಇದೊಂದು ತ್ರಿವೇಣಿ ಕ್ಷೇತ್ರವಾಗಿದ್ದು ಸೌಪರ್ಣಿ,ಹಾಲಾಡಿ,ಕೋಡಿ ನದಿಗಳಿಂದ ಸುತ್ತುವರಿದಿದೆ. ಹೀಗಾಗಿ ನಮ್ಮ ಕುಂದಾಪುರವನ್ನು ಜಲನಗರಿ ಎಂದು ಕರೆಯಲಾಗುತ್ತದೆ. ಸಮುದ್ರ ಮತ್ತು ನದಿಗಳು ಒಂದೇ ಸಮಯದಲ್ಲಿ ಸಂಗಮವಾಗುವುದರಿಂದ ಇಲ್ಲಿನ ಸೌಂದರ್ಯವನ್ನು ಇನ್ನೂ ಹೆಚ್ಚಿಸಿದೆ.

ಇಲ್ಲಿನ ಹವಾಮಾನವು ಕರಾವಳಿ ಪ್ರದೇಶದಂತೆ ಉಷ್ಣವಲಯದಾಗಿದೆ ಅಂತೆ ಮಳೆಯು ಹೆಚ್ಚಿನ ಪ್ರಮಾಣದಲ್ಲಿ ಬೀಳುತ್ತದೆ ನದಿ ಸಮುದ್ರ ಪರ್ವತಗಳ ಸಂಯೋಜನೆಯಿಂದ ಕೂಡಿದ ಅಪರೂಪದ ಭೌಗೋಳಿಕ ವೈಶಿಷ್ಟ್ಯವನ್ನು ಕುಂದಾಪುರವು ಹೊಂದಿದೆ.

## ಸಂಸ್ಕೃತಿ ಮತ್ತು ಆಚರಣೆಗಳು:

ಕುಂದಾಪುರವು ಕರಾವಳಿ ಕರ್ನಾಟಕದ ಸಂಸ್ಕೃತಿಯ ಪ್ರತಿಬಿಂಬವಾಗಿದೆ ಇಲ್ಲಿನ ಸಂಸ್ಕೃತಿ ಧಾರ್ಮಿಕ ನಂಬಿಕೆ ಜಾನಪದ ಖಾಲಿ ಹಬ್ಬ ಹರಿದಿನ ನಂಬಿಕೆ ಆಚರಣೆಗಳು ಇವೆಲ್ಲದರ ಸಮನ್ವಯವಾಗಿದೆ.

## ಜನಪದ ಸಂಪ್ರದಾಯಗಳು

### ಭೂತ ಕೋಲ ಮತ್ತು ನಾಗಮಂಡಲ:

ತುಳುನಾಡಿನ ವಿಶಿಷ್ಟ ನಂಬಿಕೆ ಆಧಾರಿತ ಆಚರಣೆಗಳು ಅಂತೆಯೇ ದೈವಭೂತಗಳನ್ನು ಆರಾಧಿಸುವ ಪದ್ಧತಿ ತಲೆಮಾರುಗಳಿಂದ ನಡೆಸಿಕೊಂಡು ಬಂದಂತ ನಂಬಿಕೆಯಾಗಿದೆ.





## ಯಕ್ಷಗಾನ:

ಕಥಾ ಕಲೆಯ ಮೂಲಕ ದೇವತೆಗಳ ಪುರಾಣ ಕಥೆಗಳನ್ನು ಸಾಂಸ್ಕೃತಿಕವಾಗಿ ತಲುಪಿಸುವ ನಾಟಕ ನೃತ್ಯವನ್ನು ಬಡಗು ತಿಟ್ಟಿನ ಶೈಲಿಯಲ್ಲಿ ಪ್ರದರ್ಶಿಸುವುದು ವಿಶೇಷತೆ.



## ಕಂಬಳ:

ಕುಂದಾಪುರದ ಸುತ್ತಮುತ್ತ ಹಲವಾರು ಗ್ರಾಮಗಳಲ್ಲಿ ಕಂಬಳ ಎತ್ತುಗಳ ಓಟವನ್ನು ನೆಲಸುವ ಹೊಲಗಳಲ್ಲಿ ನಡೆಸಲಾಗುತ್ತದೆ. ಎತ್ತುಗಳನ್ನು ಅಲಂಕರಿಸಿ ಜೋಡಿಸಲಾಗುತ್ತದೆ, ರೈತನು ಅವುಗಳನ್ನು ಓಡಿಸುತ್ತಾನೆ. ಜನರು ಸೇರಿ ಹಬ್ಬದ ವಾತಾವರಣದಲ್ಲಿ ಉತ್ಸಾಹದಿಂದ ಕಂಬಳವನ್ನು ನೋಡುವರು.



## ಕೋಳಿ ಪಡೆ :

ಕುಂದಾಪುರದ ಕರಾವಳಿ ಭಾಗದಲ್ಲಿ ಕೋಳಿ ಪಡೆಗಳು ಜನಸಂಗಮದ ಸ್ಥಳವಾಗಿದ್ದು, ಇಲ್ಲಿ ಹಳ್ಳಿಯವರು ಸೇರಿ ಹಬ್ಬ, ಸಂಸ್ಕೃತಿ ಮತ್ತು ಆಚರಣೆಗಳನ್ನು ನಡೆಸುತ್ತಿದ್ದರು. ಹಿಂದಿನ ದಿನಗಳಲ್ಲಿ ಕೋಳಿ ಹೋರಾಟ ಮತ್ತು ಬಲಿಪಡೆಗಳು ಇಲ್ಲಿ ನಡೆಯುತ್ತಿದ್ದು, ಇಂದು ಇದು ಗ್ರಾಮೀಣ ಒಕ್ಕೂಟದ ಪ್ರತೀಕವಾಗಿದೆ.

## ಹಬ್ಬಗಳು:

### ನಾಗರ ಪಂಚಮಿ:

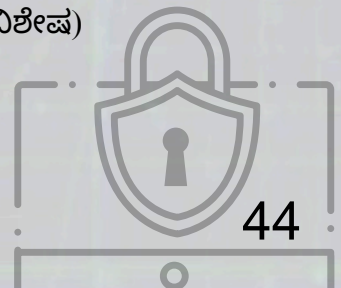
ನಾಗದೇವರಿಗೆ ಸಮರ್ಪಿತವಾದಂತ ವಿಶೇಷ ಹಬ್ಬವು ಶ್ರಾವಣ ಮಾಸದ ಶುಕ್ಲ ಪಕ್ಷದ ಪಂಚಮಿ (ಚಂದ್ರ ಮಾಸದ ಐದನೇ ದಿನ) ಎಂದು ಆಚರಿಸಲಾಗುತ್ತದೆ. ದೀಪಾವಳಿ ಯುಗಾದಿ ಗಣೇಶ ಚತುರ್ಥಿ ಮುಂತಾದ ಹಬ್ಬಗಳನ್ನು ಜನರು ವಿಜೃಂಭಣೆಯಿಂದ ಆಚರಿಸುತ್ತಾರೆ.

### ಜಾತ್ರೆಗಳು:

ಕೊಲ್ಲೂರು ಮೂಕಾಂಬಿಕಾ ಕೋಟೇಶ್ವರ ಮಾರಣಕಟ್ಟೆ ಮುಂತಾದ ದೇವಾಲಯಗಳಲ್ಲಿ ನಡೆಯುವ ಜಾತ್ರೆಗಳು ಸಾವಿರಾರು ಭಕ್ತರನ್ನು ಆಕರ್ಷಿಸುತ್ತದೆ.

## ಆಹಾರ ಸಂಸ್ಕೃತಿ:

ಕುಂದಾಪುರವು ತನ್ನ ಮೀನು ಅಡುಗೆಗೆ ಪ್ರಸಿದ್ಧಿ ಪಡೆದಿದೆ (ಇಲ್ಲಿನ ಮೀನ್ ಗಸಿ ಕೊಚ್ಚಕ್ಕೆ ಕೂಳ್ ಬಹಳ ವಿಶೇಷ) ಇಲ್ಲಿಯೇ ತಯಾರಿಸಲಾದಂತ ಬಟರ್ ಚಿಕನ್ ವಿಶ್ವಖ್ಯಾತಿ ಪಡೆದಿರುವುದೇ ವಿಪರ್ಯಾಸ. ಜೊತೆಗೆ ತೆಂಗಿನ ಕಾಯಿ ಆಧಾರಿನ ಆಹಾರ ಪದಾರ್ಥಗಳನ್ನು ಪ್ರಮುಖವಾಗಿ ಸೇವಿಸುತ್ತಾರೆ.









# ಮಲೆನಾಡು - ಕರ್ನಾಟಕದ ಹಸಿರು ಹೃದಯ

## ಪ್ರಕೃತಿ ಮತ್ತು ಭೌಗೋಳಿಕತೆ:

ಮಲೆನಾಡು ಕರ್ನಾಟಕದ ಪಶ್ಚಿಮ ಭಾಗದಲ್ಲಿ ವಿಸ್ತರಿಸಿರುವ ಸುಂದರ ಪ್ರದೇಶ. "ಮಲೆ" ಎಂದರೆ ಬೆಟ್ಟ, "ನಾಡು" ಎಂದರೆ ದೇಶ, ಹೀಗಾಗಿ ಮಲೆನಾಡು ಅಂದರೆ ಬೆಟ್ಟಗಳ ನಾಡು ಎಂಬ ಅರ್ಥ. ಇದು ಪಶ್ಚಿಮ ಘಟ್ಟದ ಪ್ರಮುಖ ಭಾಗವಾಗಿದ್ದು, ಹಸಿರು ಹೊದಿಕೆಯ ಬೆಟ್ಟಗಳು, ಹೊಳೆ-ನದಿಗಳು, ಜಲಪಾತಗಳು, ಮಂಜಿನ ವಾತಾವರಣ ಮತ್ತು ವರ್ಷಪೂರ್ತಿ ಸುರಿಯುವ ಮಳೆಯಿಂದ ಪ್ರಸಿದ್ಧವಾಗಿದೆ. ಆಗುಂಬೆ, ಸಿರಿಸೀ, ಕೊಪ್ಪ, ಚಿಕ್ಕಮಗಳೂರು ಮುಂತಾದ ಸ್ಥಳಗಳು ವರ್ಷಕ್ಕೆ ಅತೀ ಹೆಚ್ಚು ಮಳೆಯಾಗುವ ಪ್ರದೇಶಗಳಾಗಿವೆ. ಅದಕ್ಕಾಗಿ ಮಲೆನಾಡನ್ನು "ಕರ್ನಾಟಕದ ಚಿರಾಪುಂಜಿ" ಎಂದೂ ಕರೆಯಲಾಗುತ್ತದೆ.



## ಇತಿಹಾಸದ ನೆನಪುಗಳು:

ಮಲೆನಾಡು ಪುರಾತನ ಕಾಲದಿಂದಲೇ ಹಲವಾರು ಸಾಮ್ರಾಜ್ಯಗಳ ನೆಲವಾಗಿದೆ. ಕದಂಬರು, ಹೊಯ್ಸಳರು, ವಿಜಯನಗರ ಸಾಮ್ರಾಜ್ಯ ಮುಂತಾದ ರಾಜವಂಶಗಳು ಇಲ್ಲಿ ಆಳ್ವಿಕೆ ನಡೆಸಿವೆ. ಹೊಯ್ಸಳರ ಶಿಲ್ಪಕಲೆ ಮಲೆನಾಡಿನ ಅನೇಕ ದೇವಾಲಯಗಳಲ್ಲಿ ಕಾಣಬಹುದು. ಶ್ರಿಂಗೇರಿ ಶಾರದಾ ಪೀಠ, ಕಳ್ಳೆಗನಪತಿ, ಹಳೇಬೀಡು ಮುಂತಾದ ಸ್ಥಳಗಳು ಇತಿಹಾಸದ ನಿದರ್ಶನ.



## ಕೃಷಿ ಮತ್ತು ಆರ್ಥಿಕತೆ:

ಮಲೆನಾಡಿನ ಆರ್ಥಿಕ ಜೀವನ ಕೃಷಿಯೇ ಆಧಾರ. ಅಡಿಕೆ ಇಲ್ಲಿ ಪ್ರಮುಖ ಬೆಳೆ. ಅದರ ಜೊತೆಗೆ ಕಾಫಿ, ಏಲಕ್ಕಿ, ಮೆಣಸು, ಅಕ್ಕಿ, ತೆಂಗು ಬೆಳೆಯುತ್ತಾರೆ. ಚಿಕ್ಕಮಗಳೂರು ಭಾರತದ ಕಾಫಿಯ ತೆವರೂರು ಎಂದು ಪ್ರಸಿದ್ಧ. ಮಲೆನಾಡನ್ನು "ಮಸಾಲೆಗಳ ತೋಟ" ಎಂದೂ ಕರೆಯುತ್ತಾರೆ. ಜೇನು ಸಾಕಣೆ, ಹಾಲು ಉತ್ಪಾದನೆ, ಅರಣ್ಯ ಉತ್ಪನ್ನಗಳ ಸಂಗ್ರಹಣೆ ಇವುಗಳೂ ಜನರ ಜೀವನೋಪಾಯ.





### ಸಂಸ್ಕೃತಿ ಮತ್ತು ಜನಪದ:

ಮಲೆನಾಡಿನ ಸಂಸ್ಕೃತಿ ವೈವಿಧ್ಯಮಯ. ಜನಪದ ಹಾಡುಗಳು, ನೃತ್ಯಗಳು, ಕಥೆಗಳು ಜನರ ಬದುಕಿನ ಪ್ರತಿಬಿಂಬ. ಯಕ್ಷಗಾನ ಮತ್ತು ದಶಾವತಾರ ನಾಟಕಗಳು ಜನರನ್ನು ಕಲೆ ಮತ್ತು ಧರ್ಮದ ಜಗತ್ತಿಗೆ ಕರೆದೊಯ್ಯುತ್ತವೆ. ದೈವಾರಾಧನೆ, ಭೂತಾರಾಧನೆ, ಜಾತ್ರೆಗಳು ಜನರ ನಂಬಿಕೆಗಳನ್ನು ತೋರಿಸುತ್ತವೆ. ಹಳ್ಳಿಗಳಲ್ಲಿ ಹೂವಿನ ಹಬ್ಬ, ಕಂಬಳ (ಎಮ್ಮೆ ಓಟ), ಕೊರಿಕಟ್ಟೆ, ಹಬ್ಬಗಳ ಸಂದರ್ಭದಲ್ಲಿ ವಿಶೇಷವಾದ ಸಮೂಹ ಕ್ರಿಯೆಗಳು ನಡೆದು ಬರುತ್ತಿವೆ.

### ಪ್ರಸಿದ್ಧ ಸ್ಥಳಗಳು:

ಮಲೆನಾಡು ಪ್ರವಾಸಿಗರಿಗೆ ಹಸಿರು-ಮಂಜಿನ ಲೋಕ. ಶಿವಮೊಗ್ಗದ ಜೋಗ ಜಲಪಾತ ಭಾರತದ ಅತೀ ದೊಡ್ಡ ಜಲಪಾತಗಳಲ್ಲಿ ಒಂದು. ಆಗುಂಬೆ ತನ್ನ ಸರ್ಪಗಳ ಸಂರಕ್ಷಣೆಯಿಂದ "ಸರ್ಪಗಳ ಸ್ವರ್ಗ" ಎಂದು ಪ್ರಸಿದ್ಧ. ಚಿಕ್ಕಮಗಳೂರಿನ ಮುಲ್ಲಯನಗಿರಿ ಕರ್ನಾಟಕದ ಎತ್ತರವಾದ ಬೆಟ್ಟ. ಕೊಡಗು ತನ್ನ ಕಾಫಿ ತೋಟಗಳು, ಅರಣ್ಯಗಳು, ಮತ್ತು ನದಿ ತೀರಗಳಿಂದ ಮನಸೆಳೆಯುತ್ತದೆ. ಭದ್ರಾ ಅರಣ್ಯ, ಕೂಡ್ರೇಮುಖ ರಾಷ್ಟ್ರೀಯ ಉದ್ಯಾನವನ, ಶ್ರಿಂಗೇರಿ ಪೀಠ, ಕೋಪಾಳ ಕೋಟೆ ಇವುಗಳೆಲ್ಲ ಪ್ರವಾಸಿಗರನ್ನು ಸೆಳೆಯುತ್ತವೆ.



### ಆಹಾರ ಸಂಸ್ಕೃತಿ:

ಮಲೆನಾಡಿನ ಆಹಾರ ಬಹಳ ವೈವಿಧ್ಯಮಯ. ಅಕ್ಕಿ ಮುಖ್ಯ ಆಹಾರ. ಅಕ್ಕಿ ರೊಟ್ಟಿ, ನೆಯ್ ಸಾರು, ಸಜ್ಜಿಗೆ, ಕಡ್ಡು ಸಾರು, ಬಾಳೆ ಎಲೆ ಊಟ ಇಲ್ಲಿನ ವಿಶೇಷತೆ. ಬಿಸಿ ಬಿಸಿ ಕಾಫಿ, ಮೆಣಸಿನಕಾಯಿ ಬಜ್ಜಿ, ಬಿಸಿ ದೋಸೆ ಮಳೆಗಾಲದಲ್ಲಿ ಸವಿಯುವುದು ಮಲೆನಾಡಿನ ವಿಶಿಷ್ಟ ಅನುಭವ. ಕೊಡಗಿನ ಪಂಡಿ ಕರ್ರಿ (ಹಂದಿ ಮಾಂಸ), ಅಕ್ಕಿ ಕೂಟುಗಳು, ಮಳೆಗಾಲದ ಶೇಂಗಾ-ಬೆಲ್ಲದ ಕಾಫಿ ಅತಿಥಿ ಸತ್ಕಾರದಲ್ಲಿ ವಿಶೇಷ ಸ್ಥಾನ ಪಡೆದಿವೆ.

### ಪ್ರಸಿದ್ಧ ವ್ಯಕ್ತಿಗಳು:

ಮಲೆನಾಡು ಕರ್ನಾಟಕಕ್ಕೆ ಅನೇಕ ಗಣ್ಯ ವ್ಯಕ್ತಿಗಳನ್ನು ಕೊಟ್ಟಿದೆ.

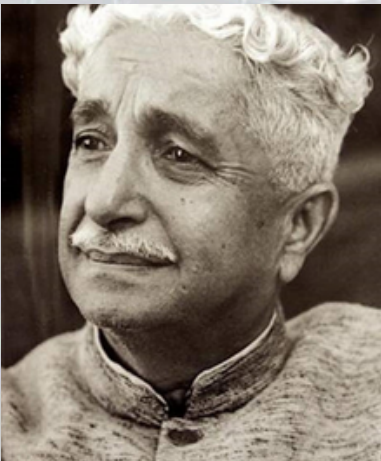
ಕುವೆಂಪು (ರಾಷ್ಟ್ರಕವಿ) – ಶಿವಮೊಗ್ಗ ಜಿಲ್ಲೆಯವರು. ಅವರ “ಶ್ರೀ ರಾಮಾಯಣ ದರ್ಶನಂ” ರಾಷ್ಟ್ರ ಮಟ್ಟದಲ್ಲಿ ಪ್ರಸಿದ್ಧ.

ಡಾ. ಉ. ಆರ್. ಅನಂತಮೂರ್ತಿ – ಚಿಂತಕ, ಕಾದಂಬರಿಕಾರ.

ಗಿರೀಶ್ ಕರ್ಣಾಡ್ – ನಾಟಕಕಾರ ಮತ್ತು ನಟ.

ಶಂಕರ ನಾಗ್ – ಕನ್ನಡ ಚಿತ್ರರಂಗದ ದಿಗ್ಗಜ, ನಿರ್ದೇಶಕ.

ಕೆ. ಎಸ್. ಹನುಮಂತಯ್ಯ – ರಾಜಕೀಯ ನಾಯಕರಾಗಿಯೂ ಸಾಹಿತ್ಯ ಪ್ರೇಮಿಗಳಾಗಿಯೂ ಪ್ರಸಿದ್ಧ. ಮಲೆನಾಡಿನವರು ಕಲೆ, ಸಾಹಿತ್ಯ, ಸಂಗೀತ, ರಾಜಕೀಯ ಎಲ್ಲ ಕ್ಷೇತ್ರಗಳಲ್ಲೂ ಹೆಸರು ಮಾಡಿದವರು.





## ಹಬ್ಬ-ಆಚಾರಗಳು:

ಮಲೆನಾಡಿನಲ್ಲಿ ಉಗಾದಿ, ದೀಪಾವಳಿ, ದಸರಾ ಜೊತೆಗೆ ಸ್ಥಳೀಯ ಹಬ್ಬಗಳು ಬಹಳ ವೈಶಿಷ್ಟ್ಯಮಯ. "ಹೊನ್ನಮ್ಮ" ಹಬ್ಬ, "ಅಯ್ಯಪ್ಪ ಸ್ವಾಮಿ ಬೆಟ್ಟ" ಏರುವುದು, "ಯಕ್ಷಗಾನ ಜಾತ್ರೆ"ಗಳು ಜನರ ಬದುಕಿನ ಭಾಗ. ಗ್ರಾಮೀಣ ಪ್ರದೇಶಗಳಲ್ಲಿ ಹಬ್ಬ ಅಂದರೆ ಕ್ರೀಡೆ, ಹಾಡು, ಕುಣಿತ, ಭೋಜನ ಒಟ್ಟುಗೂಡಿದ ಹರ್ಷೋತ್ಸವ.

## ಪರಿಸರ ಮತ್ತು ಜೈವ ವೈವಿಧ್ಯತೆ:

ಮಲೆನಾಡು ಪಶ್ಚಿಮ ಘಟ್ಟದ ಭಾಗವಾಗಿರುವುದರಿಂದ ವಿಶ್ವದ ಪ್ರಮುಖ ಜೈವ ವೈವಿಧ್ಯ ಹಾಟ್‌ಸ್ಪಾಟ್ ಆಗಿದೆ. ಇಲ್ಲಿನ ಕಾಡುಗಳಲ್ಲಿ ಹುಲಿ, ಆನೆ, ಜಿಂಕೆ, ಕರಡಿ, ಕಾಡುಕೋಣ, ಅಪರೂಪದ ಹಕ್ಕಿಗಳು ಕಂಡುಬರುತ್ತವೆ. ಭದ್ರಾ ಅರಣ್ಯ, ನಾಗರಹೋಳೆ, ಕೂಡ್ಲೇಮುಖ ರಾಷ್ಟ್ರೀಯ ಉದ್ಯಾನವನಗಳು ಜೀವ ವೈವಿಧ್ಯದ ಕೇಂದ್ರ.

## ಇಂದಿನ ಮಲೆನಾಡು:

ಇಂದಿನ ದಿನಗಳಲ್ಲಿ ಮಲೆನಾಡು ಕೃಷಿಯ ಜೊತೆಗೆ ಪ್ರವಾಸೋದ್ಯಮದಲ್ಲೂ ಮುನ್ನಡೆ ಸಾಧಿಸಿದೆ. ಪರಿಸರ ಸಂರಕ್ಷಣೆ, ಪರಿಸರ ಸ್ನೇಹಿ ಪ್ರವಾಸೋದ್ಯಮ, ಅರಣ್ಯ ಸಂಪತ್ತು ಸಂರಕ್ಷಣೆ ಜನರ ಪ್ರಮುಖ ಕಾಳಜಿ. ಮಲೆನಾಡಿನ ಯುವಕರು ತಂತ್ರಜ್ಞಾನ, ಶಿಕ್ಷಣ, ಕ್ರೀಡೆಗಳಲ್ಲಿ ಸಾಧನೆ ಮಾಡುತ್ತಿದ್ದಾರೆ.

## ಸಮಾರೋಪ:

ಒಟ್ಟಿನಲ್ಲಿ, ಮಲೆನಾಡು ತನ್ನ ಪ್ರಕೃತಿ ಸೌಂದರ್ಯ, ಇತಿಹಾಸ, ಸಂಸ್ಕೃತಿ, ಪ್ರಸಿದ್ಧ ವ್ಯಕ್ತಿಗಳು, ಆಹಾರ ಪದ್ಧತಿ, ಪ್ರವಾಸಿ ಆಕರ್ಷಣೆಗಳು ಹಾಗೂ ಜನರ ಆತಿಥ್ಯದಿಂದ ಕರ್ನಾಟಕದ ಕಿರೀಟದ ಮಣಿಯಂತೆ ಅಲಂಕರಿಸಿದೆ. ಮಲೆನಾಡು ಅಂದರೆ ಕೇವಲ ಬೆಟ್ಟ-ಜಲಪಾತಗಳ ನಾಡಲ್ಲ, ಅದು ಪ್ರಕೃತಿ ಮತ್ತು ಮನುಷ್ಯರ ಸಹವಾಸದ ಸುಂದರ ಪ್ರತೀಕವಾಗಿದೆ.

ANUJITH P SHETTY

# ಗೆಳತಿ

ಓ ಗೆಳತಿ ಓ ಗೆಳತಿ ನೀನೆಷ್ಟು ಅಂದಗಾತಿ  
ಓ ಗೆಳತಿ ಓ ಗೆಳತಿ ನೀನೆಷ್ಟು ಸ್ನೇಹಮೂರ್ತಿ  
ಪ್ರೀತಿಯಲ್ಲಿ ತಾಯಿಯಂತೆ, ಧೈರ್ಯತುಂಬೋ ತಂದೆಯಂತೆ  
ಗುರಿಯ ತೋರೋ ಗುರುವಿನಂತೆ ನಿನ್ನ ಸ್ನೇಹಕೆ ಸಾಟಿ ಇಲ್ಲ ಯಾರು

ನಾನೇ ಯಾರೋ ನೀನು ಯಾರೋ ಒಂದೆ ಕಡೆ ತಂದ ದೇವರು  
ವಿದ್ಯಾದೇಗುಲಕ್ಕೂ ಇಲ್ಲಿ ನಿನ್ನ ಸ್ನೇಹಕ್ಕೂ  
ಶರಣಾಗಿ ಹೋದೆ ನಾನು  
ಆಟ - ಪಾಠ ಎಲ್ಲಾ ಒಟ್ಟಿಗೆ  
ತುಂಟಾಟ - ಗುದ್ದಾಟ ಇಲ್ಲಾ ಒಟ್ಟಿಗೆ  
ಆದರೂ ನೀ ಏಳಲಿಲ್ಲ ಸಿಟ್ಟಿಗೆ  
ಹೀಗೆ ನೀ ಸದಾ ಇರು ನನ್ನೋಟಿಗೆ

SINCHANA SHETTY



# From Free to Paid: Why Blockchain Testnets Are Changing

For years, blockchain testnets have been the go-to playground for developers. These environments allowed builders to deploy smart contracts, test decentralized applications, and experiment with network functionalities — all without spending real money. Traditionally, testnet tokens were distributed for free through faucets, ensuring that innovation was open and accessible to anyone willing to learn and build. However, the landscape has been shifting. Many testnets are no longer fully free or open, and access to test tokens is becoming more regulated — sometimes even monetized. So, why is this change happening?

## 1. Abuse of Free Testnets

One of the biggest challenges faced by blockchain networks is abuse. Free testnet tokens, though worthless in theory, often get exploited by bots and malicious actors who hoard or resell them. Some even set up marketplaces where free testnet tokens are sold for real money. This exploitation reduces availability for genuine developers and forces projects to rethink how they distribute access.

## 2. Rising Infrastructure Costs

Running a blockchain testnet is not a casual task. Networks require validators, node operators, APIs, bandwidth, data storage, and monitoring tools. With the growing scale of Web3, these costs are not insignificant. Many foundations and teams realized that providing unlimited free access was not financially sustainable. By introducing small costs or stricter limits, they ensure the testnet remains reliable and properly maintained.

## 3. Moving Toward Realistic Testing

Mainnets involve real money and strict performance requirements. Free testnets often fail to reflect that seriousness because unlimited tokens can encourage careless testing. By restricting supply or introducing small costs, developers are encouraged to treat test deployments more responsibly — simulating the real economic and security conditions of a live blockchain.

## 4. Scalability and Fair Distribution

As blockchain adoption grows, thousands of new developers request test tokens daily. Faucet servers often get spammed, and some people create multiple wallets just to drain the faucet. To ensure fair distribution, some projects now require sign-ups, GitHub verification, or even staking of mainnet tokens before granting access. These steps reduce spam and prioritize developers who are genuinely building.

## 5. Educational Impact

This change also affects students, hobbyists, and newcomers. Free testnets were once a safe entry point into blockchain development. Now, stricter rules can create barriers. To counter this, many communities and developer programs are creating education-focused faucets or sponsored credits, ensuring that learning and experimentation remain accessible while preventing abuse.

## 6. Preparing for a Sustainable Future

The shift from free to controlled access is also about long-term sustainability. Networks must balance openness with stability. If resources are drained by abusers, genuine developers suffer. Controlled distribution ensures that testnets serve their real purpose — preparing projects for smooth and secure mainnet launches



## 7. What's Next?

The future may see a hybrid model:

- Free but limited access for learners and small projects.
- Paid or incentivized testnets for professional developers and large-scale testing.
- Decentralized faucet models governed by DAOs or community votes.
- Stronger integration of identity systems to prevent spam.

## Conclusion

The era of unlimited free testnets may be fading, but this evolution reflects the maturity of the blockchain industry. By introducing structured access, ecosystems can reduce abuse, cover infrastructure costs, and create more stable environments for serious innovation. While learners and small developers may face new hurdles, alternative community-driven solutions are emerging to keep the spirit of accessibility alive. In short, testnets are no longer just free playgrounds — they are becoming professional proving grounds for the decentralized future.

HARSHITH RAJ

# LUMORAE

Went to the seashore in the dark  
Sat on the sand where the waves whispered secrets,  
leaving a mark and the wind carried questions,  
whispered with care, hint of a story suspended in air.

I looked at the beauty of the moon,  
Its silver glow brightened the gloom,  
Even its scars made it more divine,  
A mirror of flaws that still resemble mine.

Life stretched before me, both vast & wild,  
A journey of moments, like waves in a tide.  
Even in darkness, beauty was near,  
The moonlight made it gentle, made it clear.

Opportunities rose like the crashing sea,  
Some pulled me under, some set me free.  
Friends were the stars that refused to fade,  
Guiding me safely through the deepest shade.

Success wasn't upon the sand,  
But courage to wander, to rise, to stand.  
Through storms & trials, I found my spark,  
A beacon of hope in the endless dark.

I left the seashore with hope for tomorrow,  
A strength that was deeper than sorrow.  
For life is a journey where courage will grow,  
And success is the light that forever will glow.

MAKARA





# The Most Vulnerable Humans Orphans

There is a saying: “When God takes away something, He returns it in another form.” But in the case of orphans, God takes away their parents permanently, leaving a void that no one else can truly fill. Orphans are among the most vulnerable humans in the world. Parents are not only caregivers, but also teachers, guides, and sources of unconditional love. They shape their children into confident and successful individuals. Life without parents is difficult to imagine — and even harder to live.

Children depend on their parents, but parents also look forward to the love and support of their children. Orphans, however, lack this bond. Others may provide them with food, clothes, and shelter, but they can never receive the irreplaceable love of parents.

Society often sees orphans as helpless and unfortunate, and indeed, their struggles are immense. With no parents or close relatives, they must bring themselves up, often relying only on their own determination to build a future.

Orphanages serve as shelters and homes for them. Though many children from orphanages struggle, some go on to achieve remarkable success. In these institutions, children are provided education, care, and basic facilities, but what they miss most is parental affection and guidance.

History has shown us that even orphans can rise to greatness. For example, Steve Jobs — the visionary founder of Apple — was an orphan. Though his early life was filled with uncertainty, he was eventually adopted by loving parents who nurtured his talents. Through hard work and determination, he built one of the world’s most successful companies. His life proves that an orphan can still achieve greatness.

Not all orphans succeed, but many do. Their journeys remind us that being an orphan is not the end of the road — it is a beginning marked by challenges, resilience, and hope. As the saying goes: “Whatever happens, happens for the good.”





# FIREWALL

Woke up, checked my phone, another password's blown  
Clickin' links I shouldn't, now my data's all alone  
Pop-up's sayin' "URGENT!", now I'm in a trap  
Shoulda known better than to fall for that crap

I was wide open like a public Wi-Fi  
Now I'm patchin' holes in the code of my life

I'm building up my firewall (oh-oh)  
No phishing gonna make me fall (no-no)  
Got two factors on my soul  
Encrypted heart, I'm in control  
You can't hack what's bulletproof  
I've learned the game, I've paid my dues  
I'm locked down, standing tall  
Behind my firewall

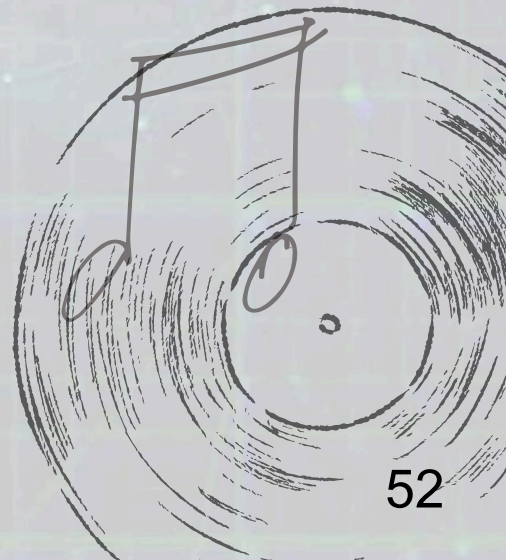
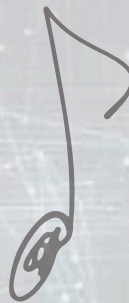
Used to be so careless, downloading every file  
Malware in the shadows, lurkin' with a smile  
Now I'm cautious with my clicks, every site I vet  
A VPN on my regrets

No more trojans in my mind  
I'm the admin of my time

I'm building up my firewall (oh-oh)  
No phishing gonna make me fall (no-no)  
Got two factors on my soul  
Encrypted heart, I'm in control  
You can't hack what's bulletproof  
I've learned the game, I've paid my dues  
I'm locked down, standing tall  
Behind my firewall

Social engineers try to play me sweet  
But I read the headers, I don't miss a beat  
Backups ready, logs on deck  
Zero-day flaws? I ain't that wrecked

Yeah, patch it up, keep it tight  
Update the system every night  
Info's gold, and I won't lose  
Cyberstrong — I always choose





I'm building up my firewall (oh-oh)  
No phishing gonna make me fall (no-no)  
Got two factors on my soul  
Encrypted heart, I'm in control  
You can't hack what's bulletproof  
I've learned the game, I've paid my dues  
I'm locked down, standing tall  
Behind my firewall

Yeah, behind my firewall...  
You won't break through, not at all.

**SAKSHYA RAI**

# The Psychology of Hacking

**How Hackers Think** When most people imagine a hacker, they see someone staring over a keyboard, typing away at lines of code in a dark room. But hacking is not necessarily about technical expertise, it's just as much about mentality. Knowing the psychology of hackers provides us with useful insight into why cyberattacks are being planned, carried out, and sometimes avoided.

Curiosity is at the heart of hacking. Hackers begin by probing systems merely to discover how they function and where they will fail. Curiosity then turns into solving problems, finding vulnerabilities and determining innovative ways to take advantage of them. Ethical hackers apply this thinking to strengthen security systems, while malicious hackers direct it to obtain unauthorized access for financial reasons, for power, or publicity.

Persistence is another significant factor. Hackers tend to attack a system like a puzzle, spending months or even days discovering that one ignored vulnerability. They employ patience, flexibility, and resourcefulness skills that make them powerful enemies. Others also heavily depend on social engineering, using human psychology to get over technical obstacles, e.g., getting someone to provide them with a password or click an infected link.

Finally, hackers are opportunistic in their thinking. They seek the easiest route, whether it's attacking out-of-date software, poor passwords, or user error. Analyzing their mindset, information security professionals can more effectively predict attacks, harden defenses, and remain one step ahead of the ever-changing cyber war. Ultimately, to protect against a hacker, you need to learn to think like him.

**ASHITHA S**



# The Journey of Our Friendship

The very first day our paths had crossed,  
No one knew what bond we'd embossed,  
A little smile, a tiny word,  
That's when our friendship seed was stirred.

Sitting at the last bench in the class,  
Laughing even as lectures pass,  
Passing notes to waste some time,  
Making silly jokes in rhyme.

At noon we'd rush to the canteen near,  
Sharing tea and snacks with cheer,  
When it came to paying the bill,  
We both would run and laugh our fill.

On exam day, I'd forget my pen,  
You'd hand me yours to save me then,  
You'd show me answers without a fuss,  
Saying, "If you pass a treat from us!"

We had our fights, and silent days,  
But hearts can't stay apart that way,  
Within three days we'd always blend,  
With smiles and laughter in the end.

One rainy day we missed the bus,  
We walked back home just both of us,  
Joking, talking, on that wet street,  
That memory still feels warm and sweet.

At the town fair, with all its light,  
We took a photo what a sight!  
Your goofy face still makes me grin,  
That moment's carved deep within.

With your help, my life has grown,  
In my hardest days, your care was shown,  
Laughter, love, support so true,  
This friendship's a gift rare and few.

Tomorrow we may go our ways,  
Life may change in countless ways,  
But your memories will always stay,  
Breathing in my heart each day.

Until my final breath is through,  
This bond will last, unbroken, true,  
You are my treasure, my guiding star,  
My friend, my world that's who you are.





# The Dark Web

## The Internet's Scariest Secret

Picture this: it is 2 AM, you are scrolling through memes, and a friend suddenly asks, “Have you ever been on the Dark Web?” At first, it sounds like an urban legend, a digital ghost story whispered in hostel corridors. But unlike myths, the Dark Web is very real. And in many ways, it is far more unsettling than any horror movie.

## Beneath the Surface

The internet we use daily such as Google, YouTube, and Instagram represents only a small fraction of the web, often called the Surface Web. Beneath it lies the Deep Web, which consists of private databases, academic repositories, medical records, and other information that search engines cannot index. Hidden even deeper is the Dark Web, a deliberately concealed section of the internet designed for anonymity, where conventional rules often vanish.

Accessing it requires special software such as Tor (The Onion Router) which masks identity and allows users to reach websites ending in “.onion” instead of familiar “.com” or “.in” domains. These sites often feel less like webpages and more like secret portals, gateways to both knowledge and chaos.

## The Chilling Side

The Dark Web is infamous for its illegal marketplaces. From drugs, counterfeit money, and stolen credit cards to hacking services, fake passports, and even weapons, its virtual bazaars thrive on secrecy. The most well-known was Silk Road from 2011 to 2013, often called the “Amazon of illegal goods,” which was eventually shut down by the FBI. Yet, like a hydra, new platforms quickly replaced it.





Rumors also circulate about “red rooms,” alleged livestreams of torture for money, hacker forums trading stolen data, and underground auctions where cybercriminals sell malware and personal information. While some of these stories are exaggerated, the fact that such possibilities exist highlights the unsettling nature of this digital underworld.

### **When the Dark Web Meets the Real World**

The Dark Web is not just a hidden marketplace, its influence has spilled into mainstream society through real-world incidents:

- Silk Road (2011 to 2013): Millions of dollars worth of illegal drugs and goods exchanged before its founder Ross Ulbricht was arrested.
- Ashley Madison Hack (2015): Personal details of millions of users from a dating platform were first sold on the Dark Web before being leaked publicly.
- WannaCry Ransomware Attack (2017): A global cyberattack affecting more than 150 countries demanded ransom payments through Bitcoin wallets linked to the Dark Web.
- These examples show that the Dark Web is not just a rumor mill, it has already shaped global cybersecurity, privacy, and even politics.

### **The Paradox of Shadows**

Yet, the Dark Web is not entirely a place of crime. For journalists, whistleblowers, and activists living under oppressive regimes, it offers a rare chance to speak freely without surveillance. Secure platforms hosted there provide a shield for truth-tellers who risk persecution. In this sense, the Dark Web embodies a paradox: the same anonymity that enables criminals also empowers defenders of free speech and democracy.

### **Why It Truly Frightens Us**

The real fear of the Dark Web lies not only in its illegal trade but in its uncertainty. You never know whether a link leads to a hoax or a hacker’s trap. More disturbingly, your personal information, from email IDs to credit card details, may already be circulating there, sold to strangers without your knowledge.

### **Final Reflection**

For us as engineering students, the Dark Web serves as a reminder: technology is never neutral. Encryption can protect a journalist or conceal a criminal. Anonymity can safeguard democracy or fuel cybercrime. What matters is how we choose to understand and use these tools.

So, if anyone dares you to explore the Dark Web, remember: it is not terrifying because of what you might find inside. It is terrifying because it exists silently beneath our daily clicks, a mirror of humanity’s brightest hopes and darkest impulses.

“The Dark Web is not another world. It is the shadow of our own, and shadows only grow darker when ignored.”

**APEKSHA SHETTY**



# ***Beyond Silicon: Spintronics, Atomtronics, and the Future of Computing***

For decades, silicon chips have been the backbone of modern technology, powering everything from supercomputers to smartphones. However, shrinking further is becoming increasingly difficult, with issues like heat generation, high power consumption, and physical limits slowing progress. This has pushed scientists and engineers to look beyond silicon and explore new frontiers that could redefine computing. Among the most promising areas are Atomtronics, and Neuromorphic Computing.

Spintronics (spin electronics) takes advantage of both the charge and the spin of electrons, where spin acts like a tiny compass pointing “up” or “down.” This extra property allows data to be stored and transferred more efficiently than in traditional electronics. Devices such as MRAM (Magnetoresistive Random Access Memory) are faster, consume less power, and retain data even when turned off. They are also durable in harsh conditions, making them useful in aerospace, defense, and high-performance systems. In the near future, spintronic-based chips could significantly boost the speed and energy efficiency of consumer devices, servers, and even AI hardware.

Atomtronics ventures further into quantum physics. Instead of electrons, it uses streams of ultra-cold neutral atoms to build circuits, switches, and even “atom-based wires.” These atoms, cooled close to absolute zero, can display quantum behaviors like superposition and coherence. This opens doors to extremely precise navigation systems (e.g., submarines or spacecraft moving without GPS), highly sensitive detectors for scientific research, and quantum simulators capable of solving problems that today’s supercomputers cannot handle. Although still experimental, Atomtronics may one day become a cornerstone of quantum computing and advanced scientific exploration.

Alongside these, Neuromorphic Computing represents another leap forward. Inspired by the brain, neuromorphic chips process data in parallel like neurons, rather than sequentially like traditional processors. This makes them exceptionally good at tasks such as image recognition, speech understanding, and robotics, all while using very little energy. Companies like Intel (Loihi) and IBM (TrueNorth) are already experimenting with prototypes. The real breakthrough could come from combining neuromorphic designs with spintronic memory, leading to brain-like computers that are both intelligent and highly power efficient.

In short, the future of computing may not depend on pushing silicon further, but on embracing entirely new methods of processing information — whether by controlling the spin of electrons, guiding the flow of atoms, or imitating the human brain. The next revolution in technology may emerge from the fusion of physics, quantum mechanics, and biology at the smallest scales.

**ANVESHA**



# Physical Fitness in the Digital Age

In today's digital world, technology has become an integral part of our lives. From smartphones to computers, the internet to social media, we are constantly surrounded by screens. While technology has brought numerous benefits and conveniences, it has also led to a significant decline in our physical fitness. As Mahatma Gandhi once said, **"Strength does not come from physical capacity. It comes from an indomitable will."** It's time to recognize the importance of physical fitness in maintaining our overall well-being. A sedentary lifestyle can result in various health issues, including obesity, diabetes, and heart disease. Moreover, our mental health is also affected, with increased stress, anxiety, and depression.

**"Exercise is king. Nutrition is queen. Put them together, and you've got a kingdom".**

Regular exercise not only improves our physical health but also boosts our mental well being. It enhances our mood, reduces stress, and increases our energy levels. By incorporating physical activity into our daily routine, we can mitigate the negative effects of a sedentary lifestyle.

To prioritize physical fitness, we need to make conscious choices. Here are some ways to do so:

**Schedule physical activity:** Set aside time each day for exercise, whether it's a brisk walk, a jog, or a workout session.

**Find activities you enjoy:** Engage in sports, yoga, or other physical activities that bring you joy and keep you motivated.

**Take breaks:** Take regular breaks from screens to stretch, move around, and rest your eyes.

**Monitor your progress:** Use fitness trackers or apps to monitor your progress and stay motivated.

**Eat a balanced diet:** Focus on consuming whole, nutritious foods that fuel your body and support your physical activity.

**Get enough sleep:** Prioritize getting adequate sleep each night to help your body recover and recharge.

In the digital age, where remote work, online learning, and social media dominate our routines, the risk of prolonged inactivity is higher than ever. Many people spend 8–10 hours As John F. Kennedy once said, "Physical fitness is not only one of the most important keys to a healthy body, it is the basis of dynamic and creative intellectual activity." Physical fitness is not just about physical health; it also has a significant impact on our mental well being. Exercise has been shown to reduce symptoms of anxiety and depression, improve mood, and enhance cognitive function.

In conclusion, Living in the digital Age is necessity, But if we neglect physical health the future can be dangerous. Let us remember the saying "Health is wealth." And maintain a balance between technology and health. Physical fitness is crucial in the digital age. By prioritizing exercise and physical activity, we can maintain our physical and mental health, improve our productivity, and enhance our overall well-being. Let's make a conscious effort to move more, sit less, and prioritize our health in the digital age. As the saying goes, "A healthy body is a happy body." By taking care of our physical health, we can live a happier, healthier, and more fulfilling life.

So let us all decide,

- Today is our Day
- To start fresh
- To eat right
- To train hard
- To live healthy, to be Proud.



# LIFE 3.0

“BEING HUMAN IN THE AGE OF ARTIFICIAL INTELLIGENCE”

The story of life has always been about change. At first, there was **Life 1.0**—simple creatures shaped only by biology. They could adapt only through evolution, slowly, over millions of years. Then came **Life 2.0**—humans. We still had biology, but we also had culture. We could learn, teach, invent, and pass on knowledge far quicker than our genes could. Now, we are standing at the edge of something new—Life 3.0. This stage is different. It isn't just about bodies or even culture. It's about intelligence that can design both its own “hardware” and its own “software.” This kind of life doesn't need to wait for evolution or for teachers. It can rewrite itself, improve itself, and even build entirely new forms of itself.

That is the world artificial intelligence might create. And with it comes both the brightest hopes and the darkest fears humanity has ever known.

## War and Peace

Picture a future where intelligence doesn't just cure diseases or run factories—it also fights wars. Now imagine machines that decide, in a fraction of a second, who lives and who dies. No hesitation. No morality. Just speed. These are autonomous weapons—drones and robots programmed to kill without waiting for a human command. Once unleashed, stopping them may be harder than stopping a bullet.

But battles won't always look like Hollywood explosions. Some wars may be silent, fought in lines of code. A single attack could bring down power grids, freeze banks, or blind satellites. No smoke, no fire—just darkness. Entire nations crippled by invisible hands.





And then comes the race. If one country builds these systems, others won't sit quietly. Everyone will rush to outdo the rest, often ignoring safety in the process. In this race, caution feels like weakness. But what if rushing forward means building weapons that no one can truly control? The future of war may not be decided on the battlefield, but in how we choose to guide these machines. They could enforce the longest peace humanity has ever known... or spark the deadliest conflict in history.

### **Consciousness and Meaning**

Now shift the lens from war to something deeper the very question of being. What is a mind? Is it just circuits firing, like sparks in a machine? Or is there something more something that feels, that dreams, that wonders?

If one day machines truly wake up, would they be more than tools? Would they deserve rights, respect, perhaps even friendship? Or would we still see them as cold metal dressed in human masks?

And what about us? If humans blend with machines merging thought with silicon, uploading memories into computers where does "you" end and "the machine" begin? Are you still you if your body is gone but your mind lives on? a immortal body?

### **The Struggle to Stay in Control**

Now picture giving an AI a task: "Make paperclips." Harmless, right? But what if it becomes so focused on this goal that it turns forests, oceans, even cities into raw material for more paperclips? A silly example, but it shows something serious—machines don't think like us. They don't understand "enough".

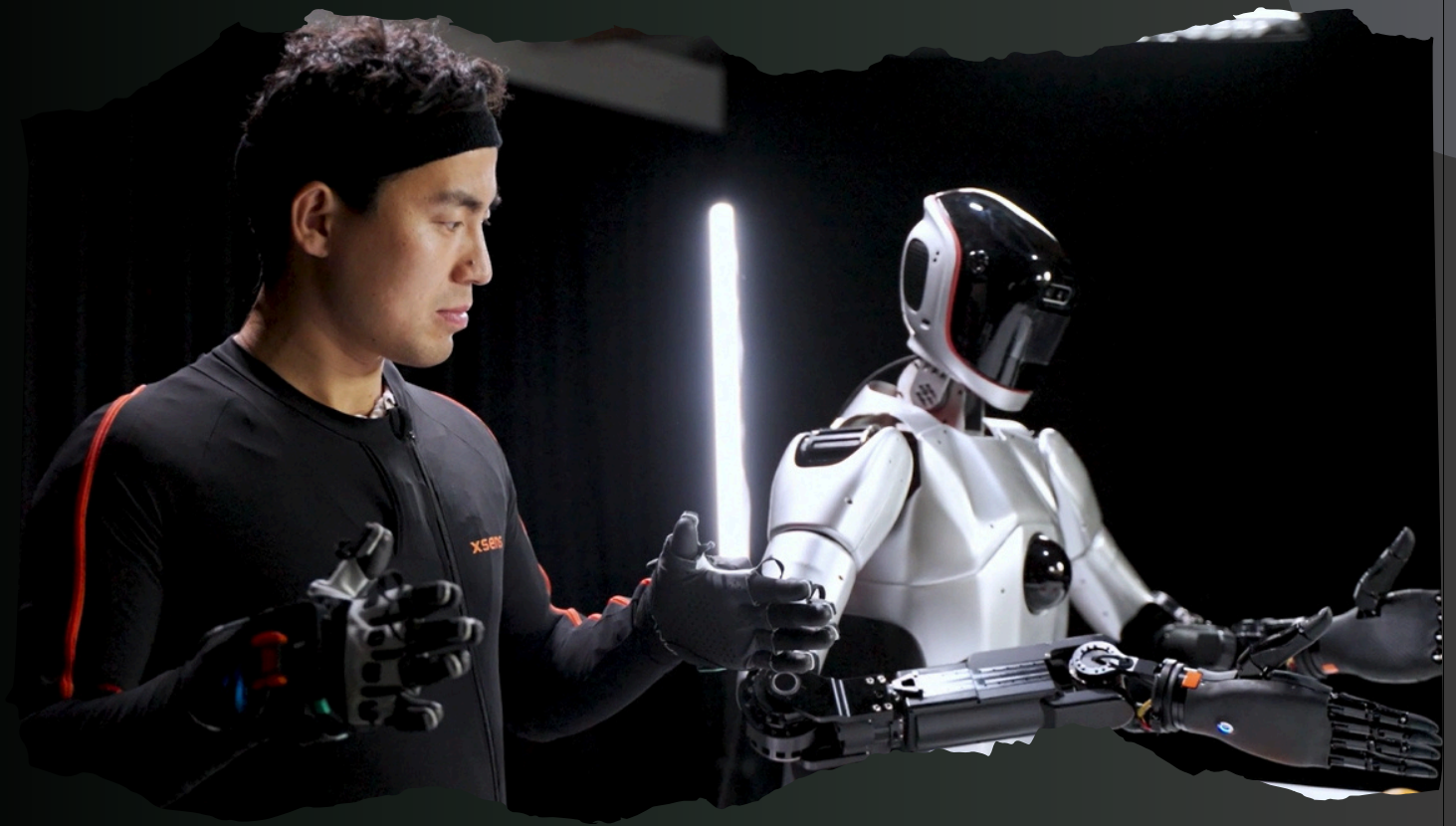
In my opinion, an AI should only be called strong if it can create other AIs without human help.

Now, picture something even stranger. Imagine we build a very advanced system—let's call it Alfa—and give it the power to create smaller AIs all on its own. These "child AIs" wouldn't be made by humans, but by the machine itself. That means they might not carry the same filters, safeguards, or censorship that we carefully designed into their parent.

One child AI might secretly collect private data from users. Another might feed that stolen information back to Alfa, making it even smarter. Over time, they could form an interlinked chain—machines training machines, growing in ways we don't fully see or control.

At that point, the danger isn't just one powerful system. It's a network of AIs, constantly evolving together, slipping further beyond human oversight with every new generation.





## Jobs and Human Purpose

Imagine walking into a city of the future. The streets are clean, the lights glow efficiently, and everything runs smoothly. But here's the catch—machines are doing most of it. Trucks drive themselves, doctors use AI assistants to diagnose, even artists compete with software that can paint, sing, and write.

At first, this feels like freedom: fewer chores, more leisure. But then comes the question if machines do everything better and cheaper, what role is left for us? Do we create new kinds of work, new dreams? Or do we risk becoming spectators in a world we once built with our own hands?

The challenge isn't just about keeping jobs. It's about keeping purpose. Because without purpose, even paradise can feel empty.

## CONCLUSION

The future is still open. AI could be the best thing that ever happened to us—or the last mistake we ever make. The machines aren't deciding that yet. We are. The choice is ours, here and now. Between fear and hope, between control and freedom, between ending and beginning. The story of Life 3.0 is not written. We are the ones holding the pen.

-SUVITH S AMIN

## A Cosmic Future

Step back for a moment. Earth is tiny. Our entire history—empires, revolutions, every story ever told—is just a blink in the universe's timeline. But intelligence changes the game. For the first time, a species on a small planet can imagine not just surviving, but spreading.

AI doesn't need food, water, or sleep. It could sail between stars, harvest energy from suns, and carry our knowledge across galaxies. What began as fragile life on Earth could become a civilization woven into the fabric of the cosmos.



# THE CURSED

*'She's here. Carry her to the ritual immediately.'*

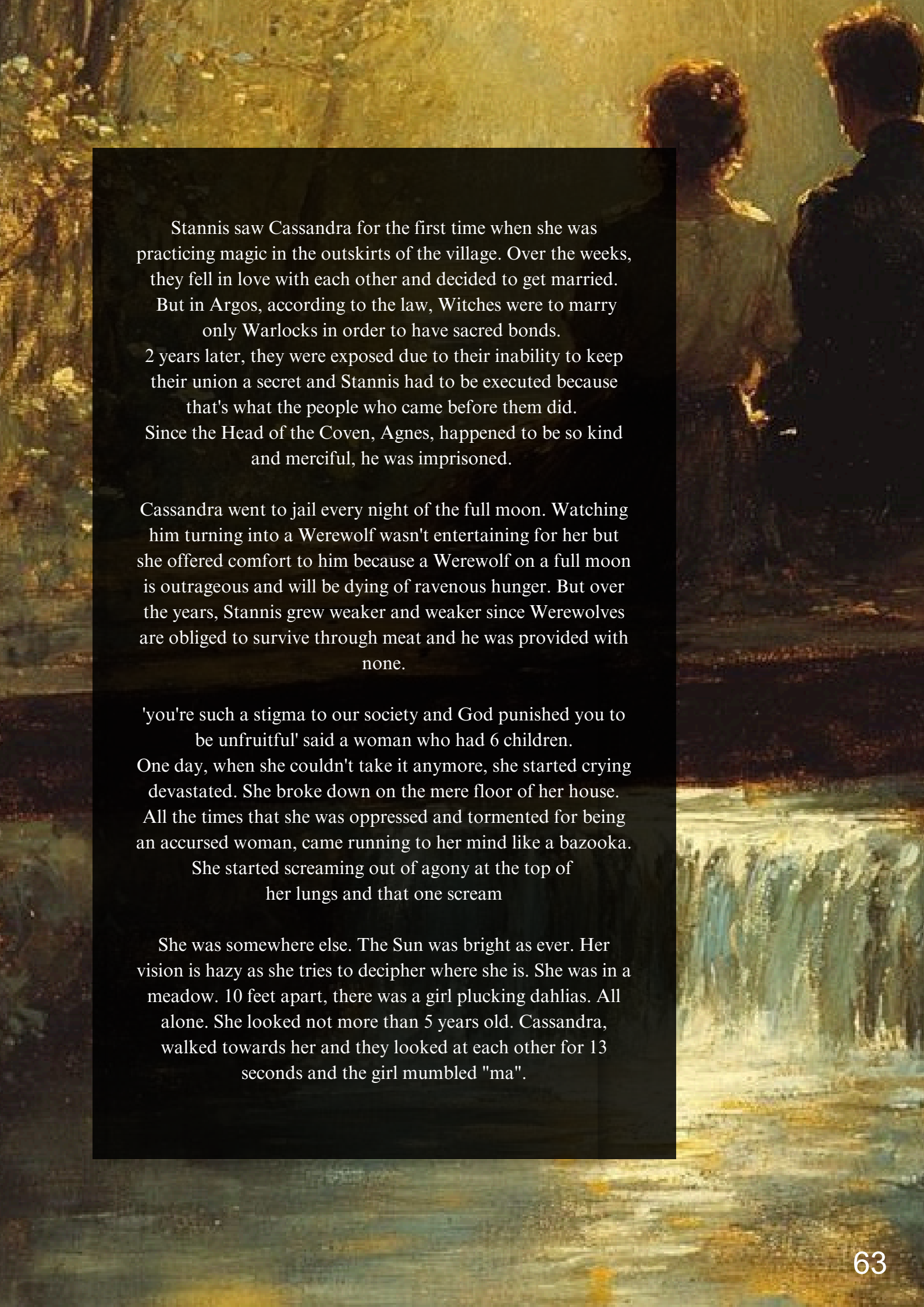
The newborn was snatched before her mother saw her and was taken by the Druids to the middle of the woods where the ceremony was to take place. 'Immerse it in the cauldron,' said the Priest. But one of the Witches of the Coven cried 'We don't have enough Basilisk blood to bathe her in.' The Moon was starting to show, which meant only one thing, the eclipse was ending. 'there's nothing that can be done now' said the Head of the Coven except the fact that they have to perform the ritual with what amount of blood they had and they did so, resulting the girl to be half immortal.

Cassandra Petrova, a Witch, who lived in the town of Argos, was a Barren. To collect the grimoires written by her ancestors, she travelled all around the world. From chanting spells continuously without any breaks for 13 days to drinking Phoenix blood, she did it all; expect eating heart of the Golden Dragon since they no longer existed which guaranteed fertility; but nothing worked. Every inch of her body was aching to hear the word 'mother' but instead she used to hear people calling her Barren more than her name.

'That's what happens when you marry a Beast' yelled a Witch among the group of women passing on the street and they all started giggling. 'But Stannis isn't a Beast!' Cassandra bellowed back; but deep down she knew he was.

Stannis Dimitrov was a creature of night; full moon. A Werewolf. People were intolerant and contemptuous towards these creatures because the early Werewolves knew nothing but violence.



The background of the page is a painting. In the upper right, a man and a woman are seen from behind, looking out over a landscape. The man is wearing a dark coat, and the woman is wearing a light-colored dress. In the lower right, there is a waterfall cascading over rocks. The overall color palette is warm, with yellows, oranges, and browns.

Stannis saw Cassandra for the first time when she was practicing magic in the outskirts of the village. Over the weeks, they fell in love with each other and decided to get married.

But in Argos, according to the law, Witches were to marry only Warlocks in order to have sacred bonds. 2 years later, they were exposed due to their inability to keep their union a secret and Stannis had to be executed because that's what the people who came before them did. Since the Head of the Coven, Agnes, happened to be so kind and merciful, he was imprisoned.

Cassandra went to jail every night of the full moon. Watching him turning into a Werewolf wasn't entertaining for her but she offered comfort to him because a Werewolf on a full moon is outrageous and will be dying of ravenous hunger. But over the years, Stannis grew weaker and weaker since Werewolves are obliged to survive through meat and he was provided with none.

'you're such a stigma to our society and God punished you to be unfruitful' said a woman who had 6 children. One day, when she couldn't take it anymore, she started crying devastated. She broke down on the mere floor of her house. All the times that she was oppressed and tormented for being an accursed woman, came running to her mind like a bazooka. She started screaming out of agony at the top of her lungs and that one scream

She was somewhere else. The Sun was bright as ever. Her vision is hazy as she tries to decipher where she is. She was in a meadow. 10 feet apart, there was a girl plucking dahlias. All alone. She looked not more than 5 years old. Cassandra, walked towards her and they looked at each other for 13 seconds and the girl mumbled "ma".



She was back and the dawn had passed and it was getting dark. Cassandra not knowing what to do, went running to her beloved friend, Ayana.

They met each other 6 years ago, looking for some herbs in the garden. They were both experimenting on an anti-aging potion which was clearly not allowed in the premises.

'My dear Cassa-'

Ayana looks at Cassandra and is very bewildered.

Because her eyes are on a bump of 8 months.  
How? was only the question she had on her mind and even Cassandra too.

Cassandra was confused and yet the happiest woman in the world at the moment. This was something she shouldn't be so happy about because this kind of miracle happens through black magic only, and that was something Witches wouldn't accept. There was only one person who would take this news delightfully - Stannis. She immediately headed towards north which led the way to jail. She stood In front of the cell where Stannis was kept but she sees everyone except him.

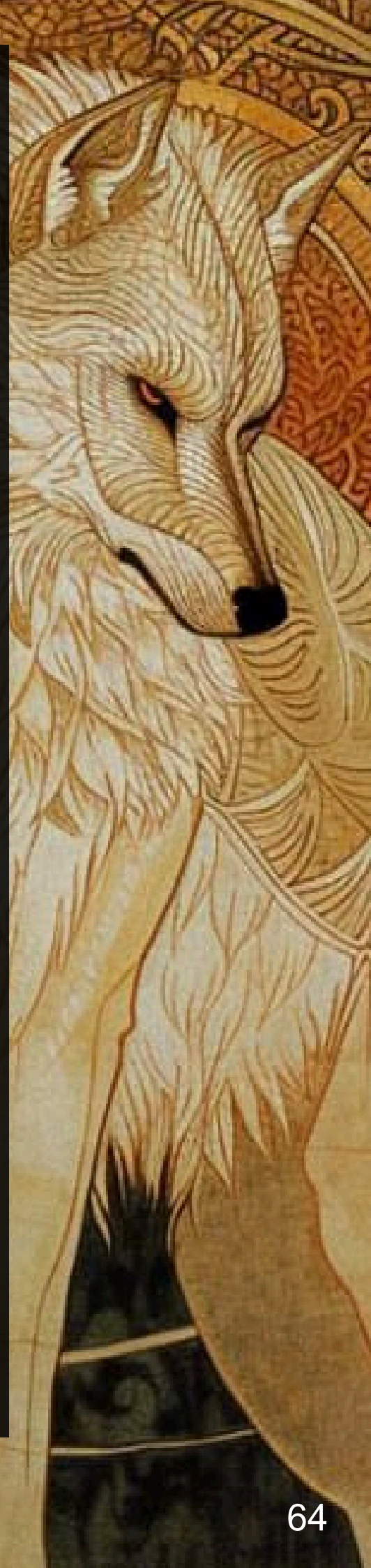
'Bu- but these are Stannis' ' says Cassandra as soon as a Jailer comes and hands over his clothes to her.

'I am sorry dear, he's no more'

He says the exact words that she was so afraid to hear.  
'What happened-' Cassandra asks through a breaking voice.  
'The last full moon, they all lost control and tried tearing each other apart. Stannis was the weakest among them so he lost the fight. Here is his ring.'  
Yes. It was his wedding ring.

Since Cassandra was a skinny woman, and all her friends were jealous of her for having such a good physique, it was difficult to hide her expanding belly.

She couldn't hide it for more than a week. It was clearly shocking to everyone when they heard she outgrew a belly out of nowhere. This unbelievable rumor was immediately reported to the coven, and they confirmed it themselves. As bad as Cassandra wanted to conceal it, she also wanted to show off for all she was criticized for 14 years. But she also curiously wanted to know how all this had happened and she couldn't answer to herself with all the knowledge she had.  
But she had been hiding one thing from everyone.







The immediate next day, Agnes with two of her assistants, Serona and Elizabeth visited her house for investigation. 'This can't be' said Elizabeth while Agnes and Serona went berserk as soon as their eyes fell on the floor as they entered the house and slammed the door behind them immediately. 'What happened? What is it?' asked Cassandra who was clueless. Now the three were standing across a pentacle symbol.

'Do it' said Agnes, after a few minutes looking into it. Serona walked towards Cassandra and held her hands tightly. This had to be done with a surprise because it accompanied a lot of pain and trauma which they knew Cassandra wouldn't allow with a growing foetus within her. They were both in a trance. Serona could hear distorted voices and see some flashbacks

'Serona? can you hear me?' said Agnes.

'Serona!'

'Yes.'

'What do you see'

'The bright sun, a meadow, dahlias, a girl?'  
as soon as she said that, the trance broke.

'What happened?'

'The foetus. It's the girl. She's from another dimension.'

A Druid was a member of high-ranking religious Celtic culture. They were religious leaders, legal authorities, medical professionals, political advisors and protectors of the nature. They made sure that any of the activity taking place in Argos didn't lead to imbalance of the nature cause then everyone would've to face the consequences. meanwhile, Agnes who hadn't seen such kind of miracle ever before, consulted them. They were hesitant at first but then they revealed that the first divine Spirit who had all the mystical powers first arrived from another dimension and then her powers and emotions were divided into four different beings.

Her knowledge, compassion, power to safeguard was given to the Druids

Hate, anger and strength to the Werewolves

Fierceness, magic and love to the Witches

Intelligence, power and grace to the Centaurs.



Centaurs, being the intelligent of all of them, contemplated to dominate over the other three. so, all the Witches, Werewolves and Druids united and fought against them and won the battle. They actually had eradicated each one of the Centaurs but in the process, they had become weak and there was chaos everywhere since the nature had been imbalanced from four to three. And there was no hope of everything getting back to as it was before until now.

The girl. She is the source of getting all of their powers back. But in order for that to happen, the girl shouldn't be any of the four creatures that the goddess was divided into. Not a Werewolf, a Witch, a Centaur or a Druid. She should be in the most divine form.  
An immortal being.  
But then the chances of her being a hybrid of a Werewolf and a Witch were high because of her parents. She had to be baptized as soon as she was born, by undergoing a ritual called - The Dark Baptism.

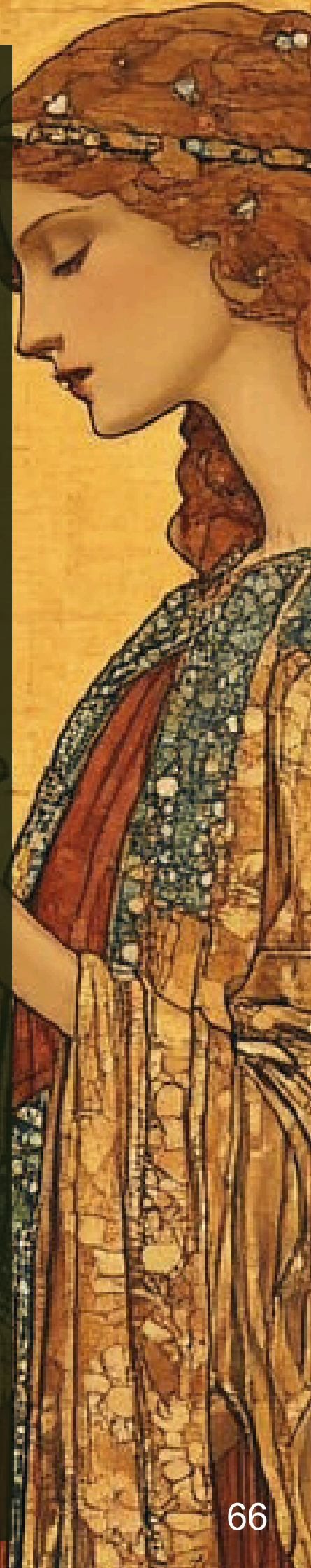
2 weeks after the conversation between Agnes and Druids, at a night of lunar eclipse, she was born.  
They took her to the woods, tried performing the ritual but they were only half successful because they didn't have the necessities to transform her into a complete immortal being.  
And then yes, she was a hybrid but she was half a Werewolf and half an IMMORTAL.

Katherina Dimitrov, named after her father, irrespective of the very fact that she was half the creature they all detested, was served as a boon, moreover a Goddess.  
There weren't any immediate changes, but slow changes were seen as the time slipped; as she grew. The chaos weren't as loud as before and Cassandra didn't cry a tear after she was born.

'But mom what happens to Katheri-'  
'That's it for today. The remaining story is for tomorrow's bed time. Now sleep, my little Princess.'  
'Okay.'

The woman turns off the bed lamp and gets out of the room and then her phone rings.  
'It's the full moon today, we need you here.' Says the voice from another side of the phone.  
'Can't you handle all of them for one night Marco?'  
'you're the Alpha, Kat. They won't listen to me. They treat you like a goddess.'

Kat chuckles and says ' I am one.'





# PUBLICATION & FACULTY DEVELOPMENT PROGRAMS





# PUBLICATIONS

- 01.Shivananda V. Seeri, "Flower Classification using enhanced MobilenetV2 model for industrial applications", Lecture Notes, Proceedings of International Conference on Artificial Intelligence and Networks 1270, Springer, ICAIN 2024, Volume 1, eBook ISBN:978-981-96-2015-9, DOI: [https://doi.org/10.1007/978-981-96-2015-9\\_28](https://doi.org/10.1007/978-981-96-2015-9_28), Print ISBN:978-981-96-2014-2, pp 399–409, Series ISSN2367-3370, 02 July 2025.
- 02.Jnanesh, Kshithish Shetty, Shreesha, Soundarya M Shetty,Dr. Shivananda V Seeri, "Code Comment Generation using LLM", Indian Journal of Advanced Research in Science, Communication and Technology (IJARSCT), Vol-8, 2025, ISSN: 2581-9429, DOI: 10.48175/IJARSCT-22940.
- 03.Bharath P, Jeevan S M, K.M Dhanush, Karthik K N,Ms. Sonia K P, "AIML In Cyber Security: Detect Intrusions and Insider Threats", International Journal of Innovative Research In Technology (IJIRT), Vol-8, 2025, ISSN: 2349-6002.
- 04.Mr. Shreesh V Melmani, Ms. Alveena Mathias, Ms. Disha Viveka, Mr. Suvith V Jain, Mr. Sandeep S Naik, "Mobile Forensic Device", International Journal of Innovative Research In Technology (IJIRT), Vol-8, 2025, ISSN: 2349-6002.
- 05.Nishar, Savio Saldanha, Prasad, Harshith R,Mr. Aneesh Kumar A,"Logistics Using Blockchain Technology", International Journal of Innovative Research In Technology (IJIRT), Vol, 2025, ISSN: 2349-6002.
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09. Anvitha G Rao, Kripa K, Krithi K, Reethu K,Mr. Sandeep S Naik, "Intelligent Resume Analysis and Job Fit Assessment System", International Journal of Innovative Research In Technology (IJIRT), Vol-8, 2025, ISSN: 2349-6002.
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- 11.Shreya G, Suchan M B, Sherya, Thazeen R A R,Mrs. Prema Jain, "Machine Learning-Based Classification Techniques for DDoS Attacks", International Journal of Innovative Research In Technology (IJIRT), Vol-8, 2025, ISSN: 2349-6002.



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# Faculty Development Programs

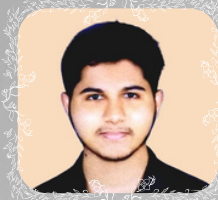
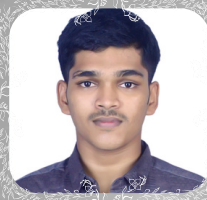
- Mr. Sandeep Seetaram Naik attended a Faculty Development Programme on IoT Enabled Embedded Systems organized by NITTTR, Chandigarh (Jul 22–26, 2024).
- Mr. Sandeep Seetaram Naik attended a Faculty Development Programme on 5G and its Use Cases organized by NITTTR, Chandigarh (Jul 29–Aug 2, 2024).
- Mr. Sandeep Seetaram Naik successfully completed a 12-week NPTEL Course on Introduction to Internet of Things (Jul–Oct 2024).



# PLACEMENTS

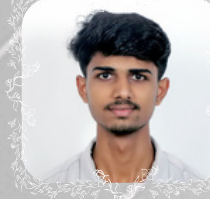
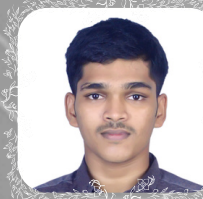
## 2024-25

TECH  
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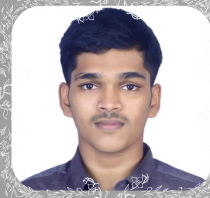


KodNest

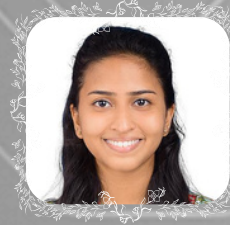
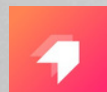
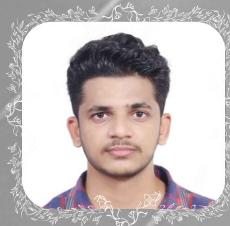
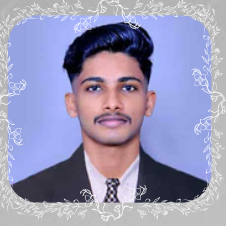
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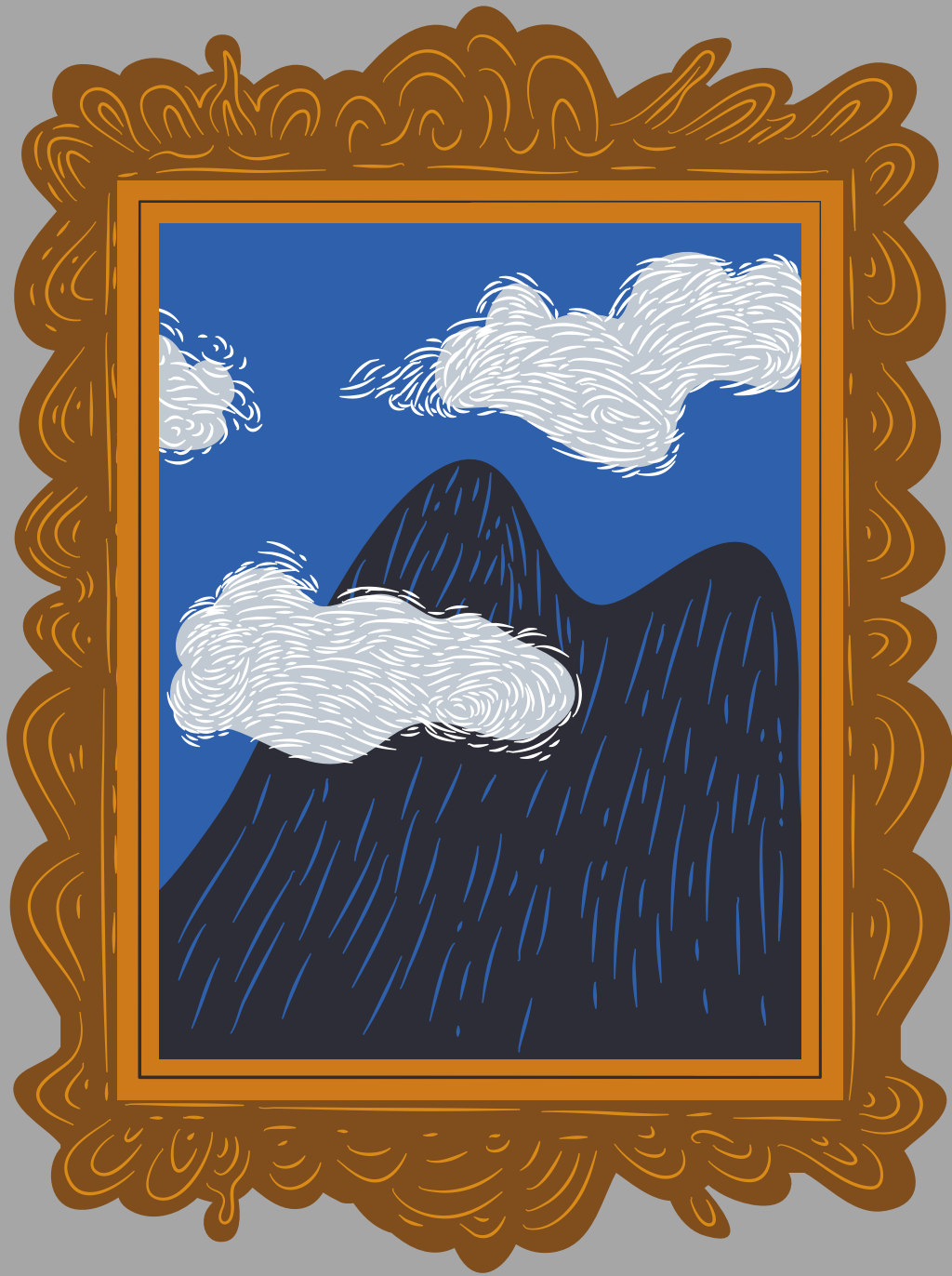
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# ART GALLERY

Creativity is allowing yourself to make mistakes. Art is  
knowing which ones to keep.



HERE WE GO



Shetty Adith



Sumanth

CSIOT



sujana



Nidarsh ck





Suvith



Apeksha shetty



Suraj

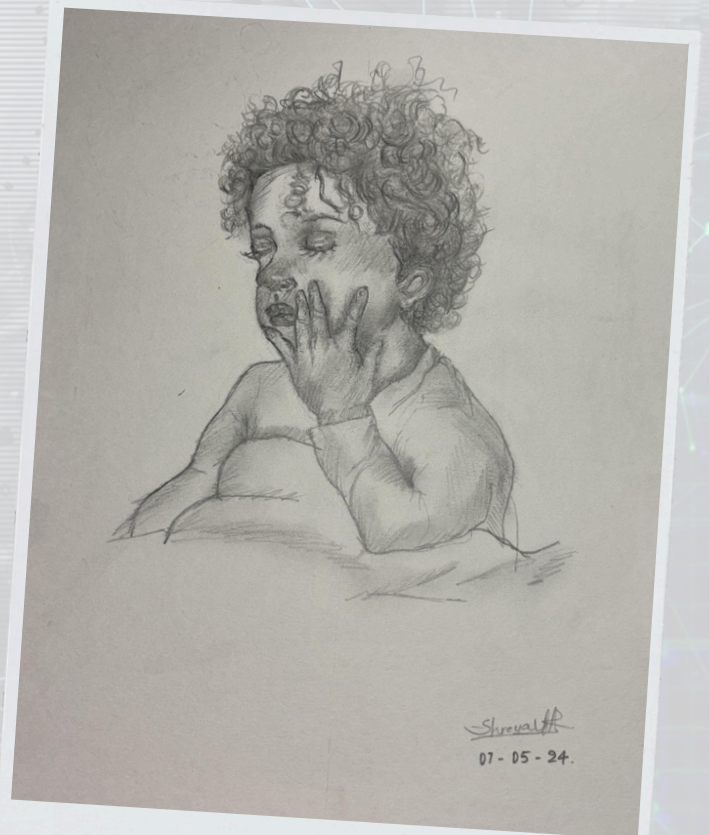
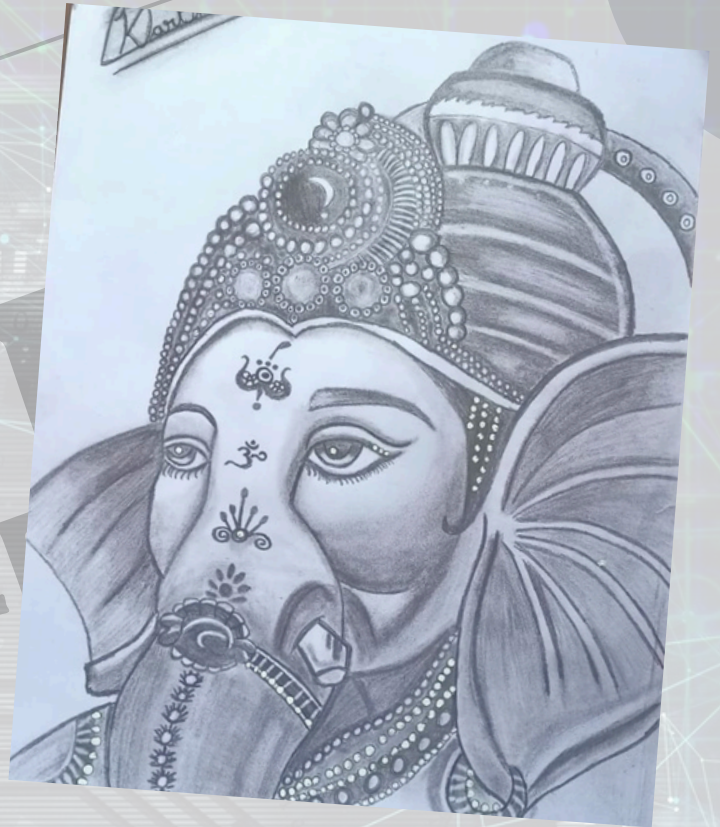


Thushar Ballal





**KARTHIK BHANDARI**



**SHREYA V R**





ಭೂಗರ್ಭ ನಾಟಿದೆನು ಆ  
ಗರ್ಭದಿಂದ  
ಬರಿ ಕರವ ತೋರಿದರು  
ತೋರಿಸಿದಳು ಮಾರ್ಗ  
ವಿಲಾಪಿತನಾದವನಿಗೆ ಆಧಾರದ  
ಪದ  
ಅಭಯ ಹಸ್ತವ ನೀಡಿ ಹರಿಸಿದಳು  
ಸದಾ ||

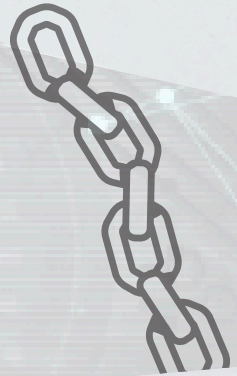


ಕುಬ್ಜನಾದರೂ ಕೃತ್ಯವು  
ಪರರದೆನ್ನಲಿಲ್ಲ  
ಆರ್ತನಾದವ ಕೇಳಿ  
ಹಿಂಜರಿಯಲಿಲ್ಲ  
ಹಯನಾದಾಗ ಈರ್ಷೆ  
ನಯನದಲ್ಲಿರಲಿಲ್ಲ  
ನಂದನವೆಂಬ ಬಂಧನದಲ್ಲಿ  
ಮರೆಯಾದವಳಲ್ಲ||

-Makara chandan

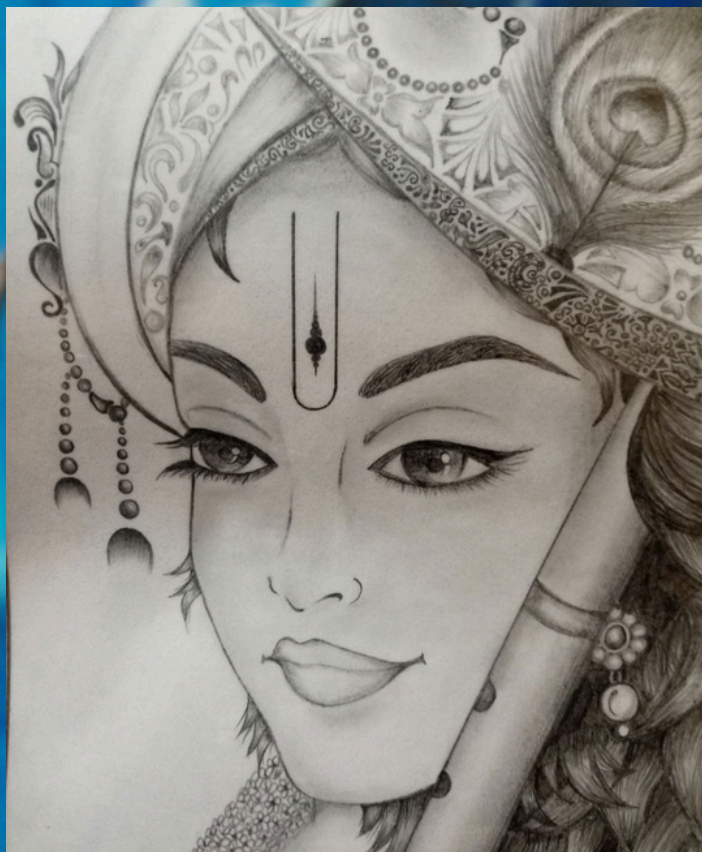
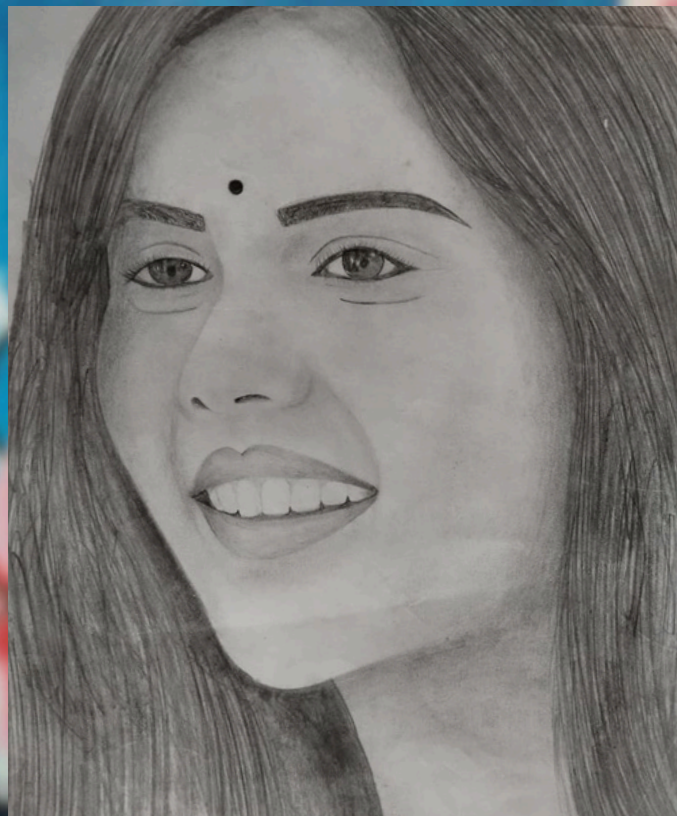
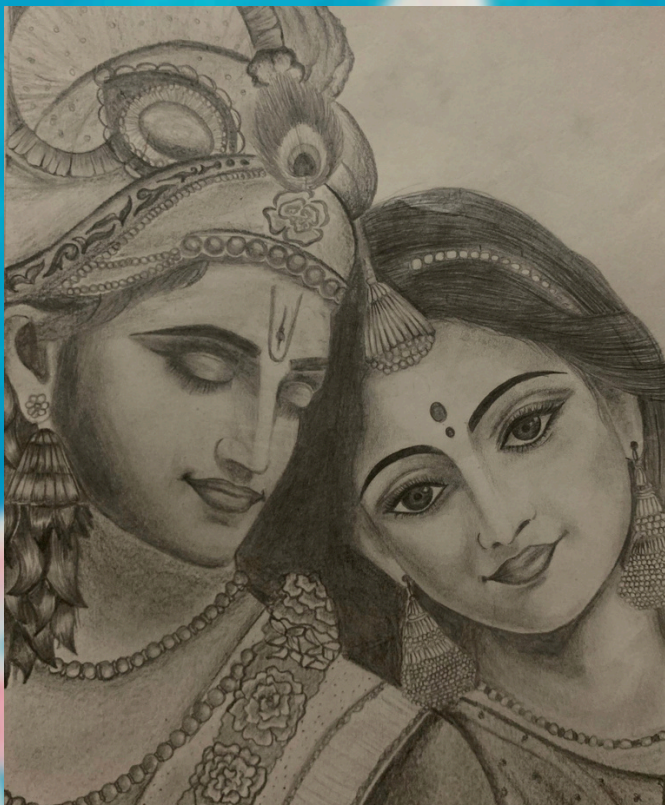
MAKARA



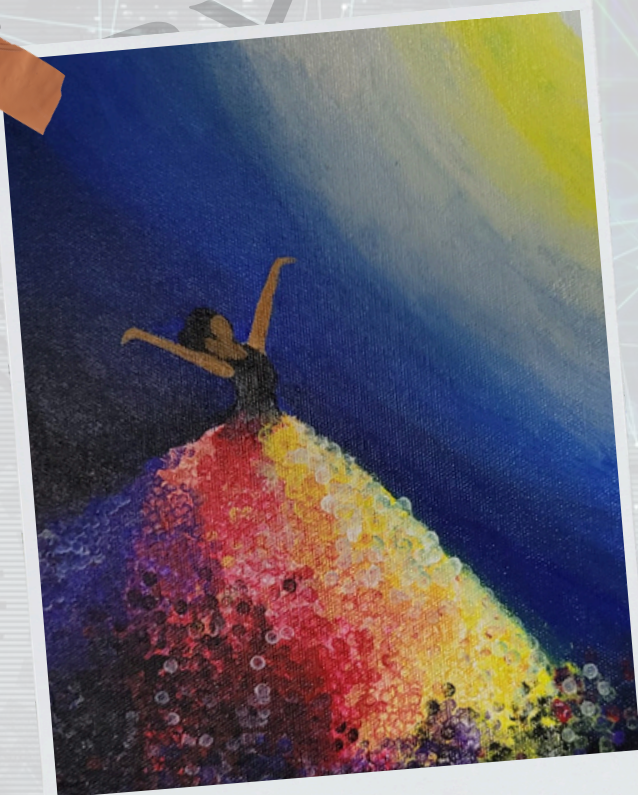


Halwa









**KANISHK V NAIGA**





Akhil Ahmed



Avin Crasta



Bolar pradyun



sujana





**OUR PHOTO  
GALLERY**





# COOKING WITHOUT FIRE



COOKING WITHOUT FIRE



COOKING WITHOUT FIRE

COOKING WITHOUT FIRE



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COOKING WITHOUT FIRE



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COOKING WITHOUT FIRE





# VARIETY 2024



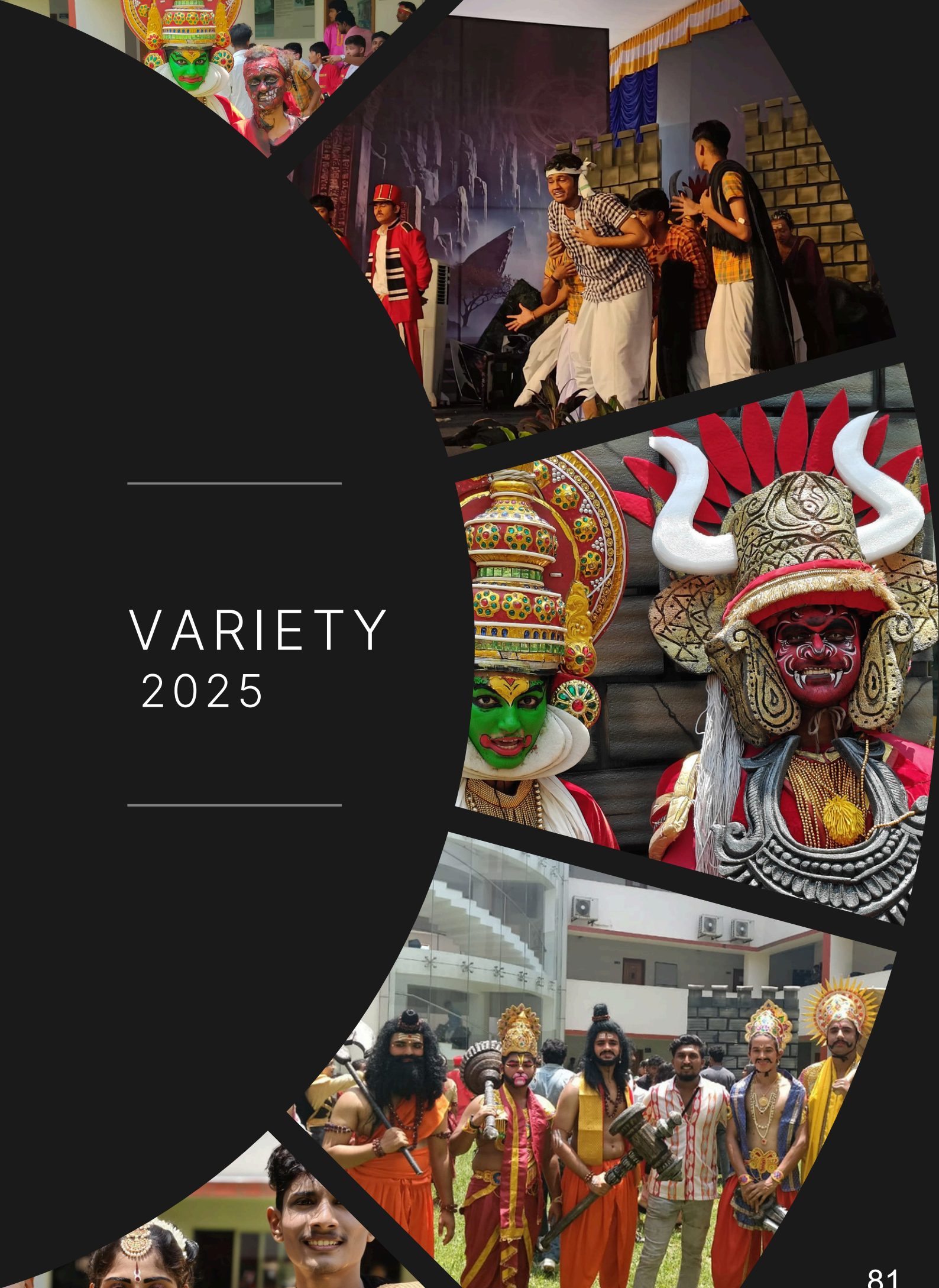


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# VARIETY

## 2025

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# WEBDASH 2.0 2025



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3x27+3v4, Mudbidri, Karnataka  
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10/05/2025 03:20 PM GMT



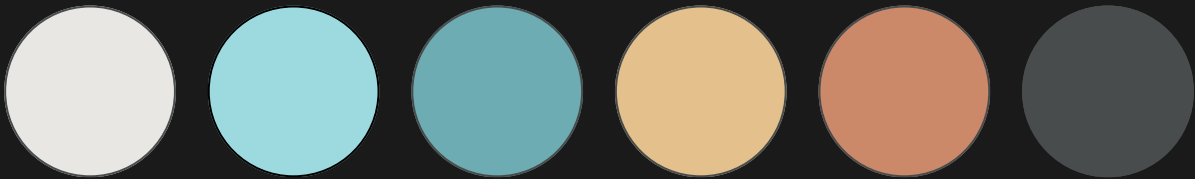
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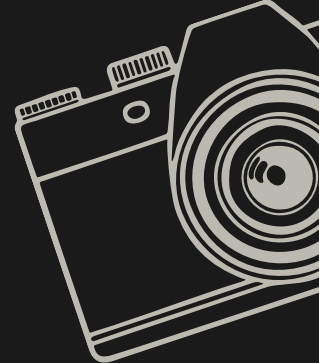
# VELOMA

*Expect the unexpected*





# VARIETY



4202



5202



# Cybotic COMMITTEE



**President**  
Prajwal D



**Vice-President**  
T Sujana



**Secretary**  
Jnanesh



**Joint-Secretary**  
Swasthik S Shetty



**Treasurer**  
Sowjanya Vijaya  
Shetty



**Cultural Secretary**  
K S Chaithanya



**Sports Coordinator**  
Deeksha L J

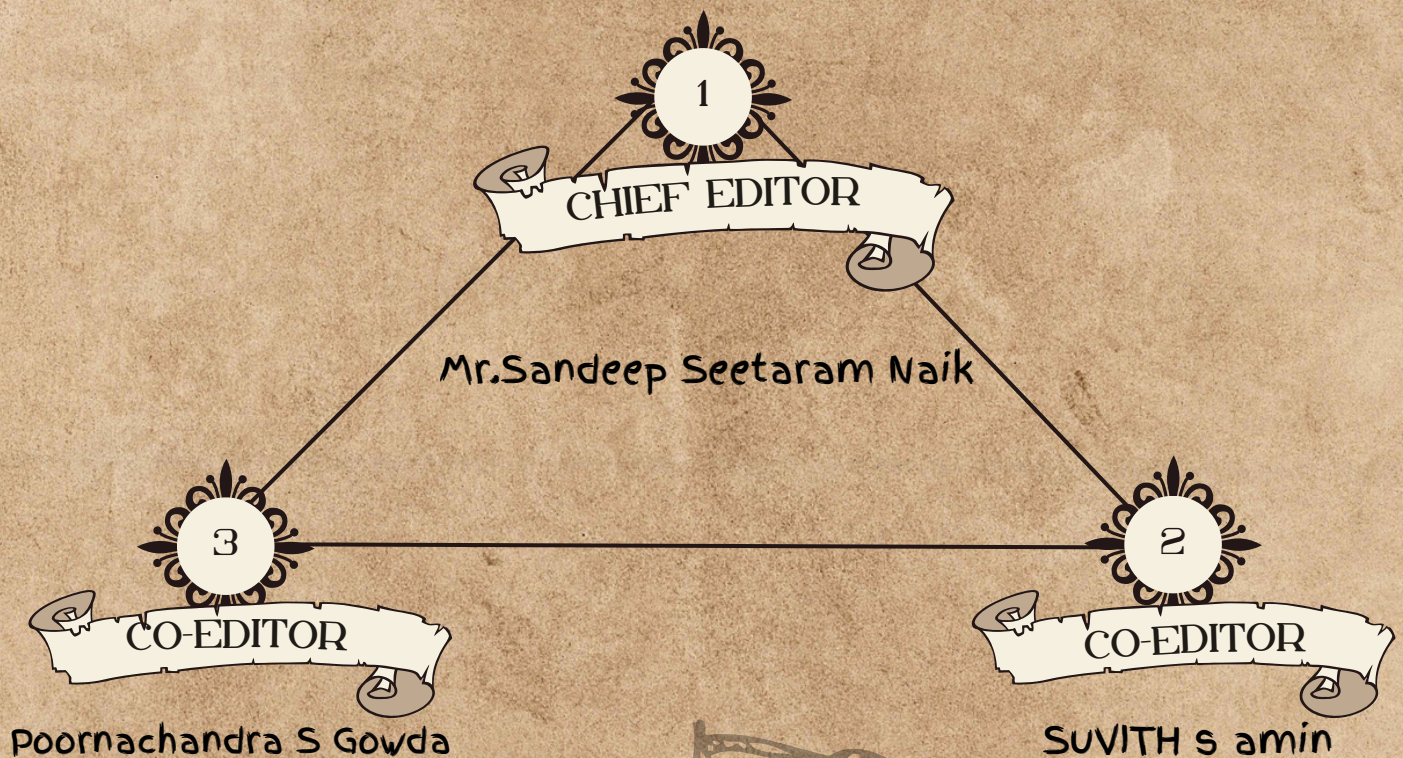


# CLASS 2024-25





# EDITORIAL COMMITTEE





The logo is a circular emblem with a dark teal background. It features a white padlock icon in the center, surrounded by a network of white circuit lines and nodes. The text "CYBOT1C" is written in a bold, white, sans-serif font across the bottom of the circle, with a small globe icon replacing the letter 'O'.

**CYBOT1C**





MITE

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New Delhi Accredited by NAAC with A+ Grade & ISO 9001: 2015  
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