

## **A Technical talk on “Software Engineering - Technical Skills”**

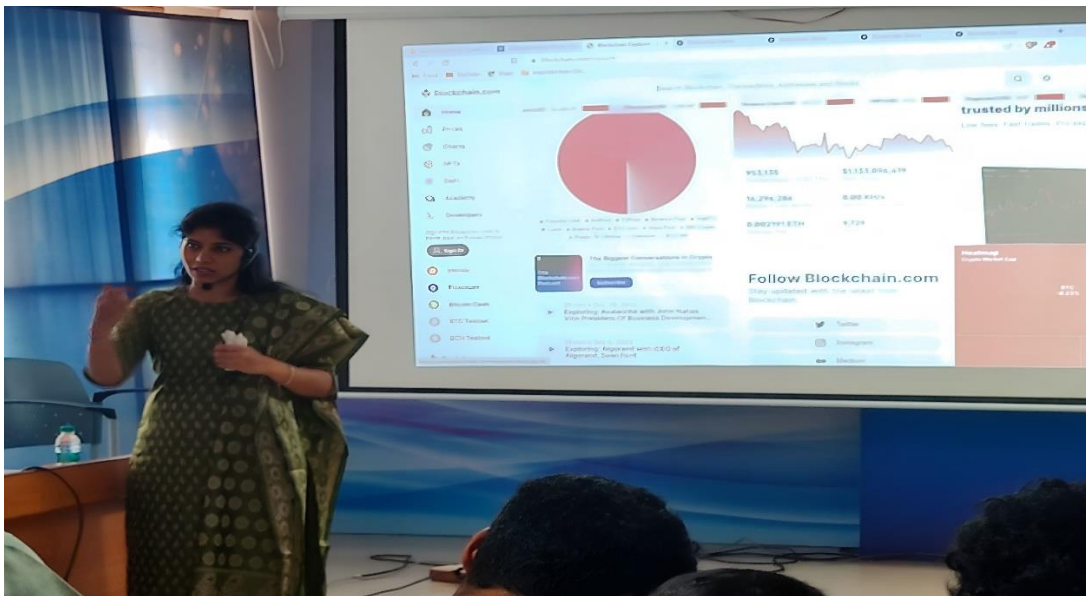
The Department of Computer Science & Engineering hosted a technical talk on “Software Engineering - Technical Skills” by Mr. Prashanth Hegde, Senior Principal Technical Architect at Robosoft, Udupi, on December 12, 2022. The resource person enlightened the students on various software engineering skills. The emergence of technology in the field of Computer Science for solving various real-time problems poses an urgent need to acquire knowledge on the same to keep pace with technological advancements. The enhancement of knowledge in various skills required for a software engineer would help the students gain more knowledge and, in turn, increase their chances of job opportunities.

The resource person provided valuable insights to students regarding essential software engineering skills. In today's rapidly evolving field of computer science, technology plays a vital role in addressing real-time challenges. This underscores the critical importance of acquiring and continually updating knowledge to remain on par with technological advancements. Aspiring software engineers must recognize that their skill set is their greatest asset in the competitive job market. By consistently upgrading their expertise in various software engineering disciplines, students not only expand their knowledge but also enhance their job prospects. These skills encompass a wide range of areas, from programming languages and development methodologies to problem-solving and teamwork. Ultimately, this knowledge upgrade empowers students to be adaptable and innovative in their careers, enabling them to contribute effectively to the ever-changing landscape of technology-driven solutions and seize exciting job opportunities in the dynamic world of software engineering.



## **A technical session on how blockchain transforms the financial sector and money**

The Department of Computer Science & Engineering organized a technical session on how blockchain transforms the financial sector and money on 30-12-2022 by Ms. Shwetha Bhandary, Lead Product Manager at Wells Fargo, Bengaluru. The resource person gave insight into Blockchain technology and its transformative force in the financial sector, revolutionizing the way money is managed, transferred, and secured. She also highlighted this innovation as a distributed ledger system that ensures transparency, security, and efficiency in financial transactions. She also emphasized the benefits of Blockchain as a facility for faster and cheaper cross-border transactions. Additionally, blockchain transactions can occur in real-time, and intermediary fees are minimized.



## **A technical talk on software Aging**

Computer Society of India (CSI) MITE Student Branch, in association with the Institution Innovation Council (IIC), organized a technical talk on software aging. Dr. Biju R Mohan, Assistant Professor (Grade I) at the National Institute of Technology Karnataka, Surathkal, delivered this talk on January 3rd, 2023.

The resource person explained that detecting software aging is crucial for maintaining the long-term health and stability of software systems. Various techniques can be employed to monitor a system's behavior and performance indicators over time. These methods include resource utilization monitoring, error log analysis, and regular health checks. By identifying early signs of software aging, developers and administrators can take proactive measures to mitigate its effects, such as applying patches, optimizing code, or reallocating resources. During the technical session, the speaker likely delved into the causes, consequences, and detection methods related to software aging, highlighting the significance of understanding, and managing this challenge. Additionally, the case study presented in their research probably provided practical examples and data to illustrate the real-world implications of software aging, offering valuable insights into effective mitigation strategies.



### **A Talk on "Innovation, Career, and Research Mind"**

The Department of Computer Science and Engineering and the Department of Information Science & Engineering jointly organized a talk on “Innovation, Career, and Research Mind” on 9-04-2023 by Dr. Somashekar Bhat, Joint Director, MIT.

Dr. Somashekar Bhat, the resource person, emphasized the critical importance of acquiring relevant skill sets to meet the dynamic demands of the contemporary job market. In an era characterized by rapid technological advancements, Dr. Bhat stressed the need for individuals to remain adaptable and agile in the face of change. Dr. Bhat illustrated how those who embrace and integrate evolving technologies into their skill repertoire can significantly enhance both their business endeavors and career development. These practical demonstrations likely served as tangible evidence of the transformative power of staying current with technological trends. He stressed that failing to keep pace with new technologies can impede one's career growth. In

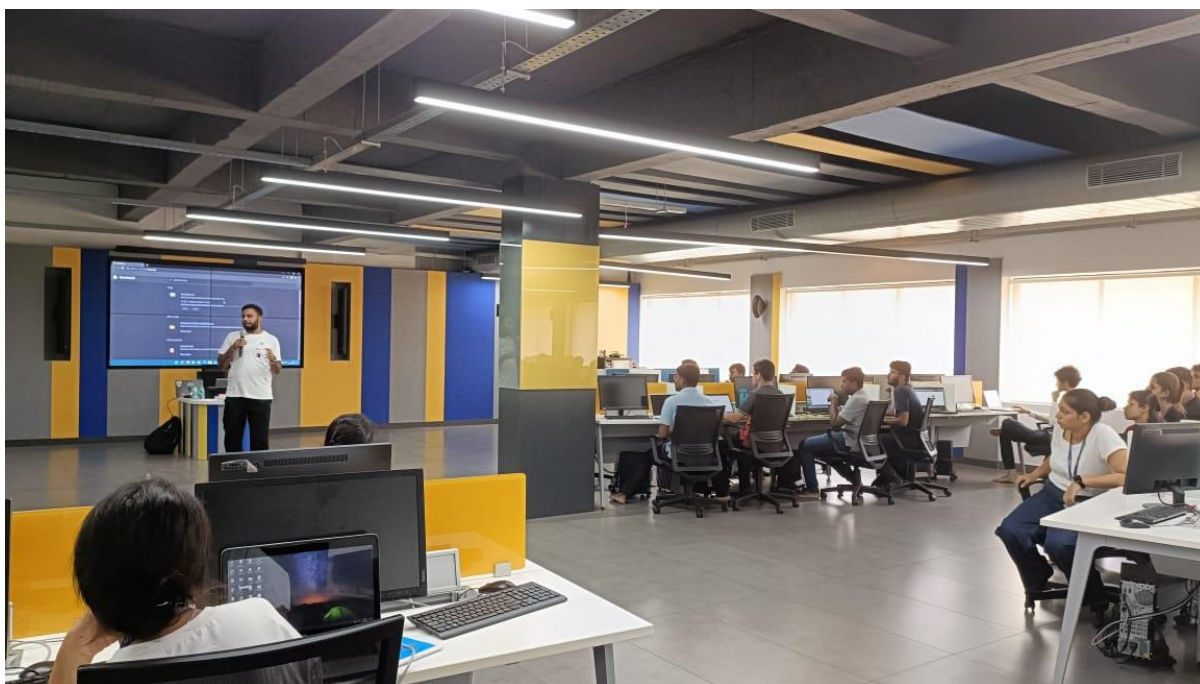
today's competitive job market, where innovation and technological proficiency are highly valued, the unwillingness to adapt and learn can be a significant hindrance.



### **Hands-on Workshop on 'Building Restful APIs Using JavaSpringBoot'**

The Department of Computer Science & Engineering organized a hands-on session on 'Building Restful APIs Using Java Spring Boot' on April 15th, 2023, by Mr. Arpith S, a Machine Learning Engineer at Apps10x. He enlightened the fundamental aspects of Java Spring Boot and the art of constructing web applications using Java and associated frameworks. He provided valuable insights into the various technologies that play a pivotal role in this process, with a particular focus on tools like Maven, Gradle, and Intel 11.

Mr. Arpith highlighted the pressing necessity for young engineers to continually upgrade their knowledge and skillsets, particularly in the realm of Restful APIs and web application development with Java Spring Boot. One of the highlights of his presentation was the hands-on demonstration of how to initiate a Maven project and create a Spring Starter Web application, which forms the foundation for web application development. He further elucidated the intricacies of building RESTful applications using the Spring MVC framework, offering attendees a practical understanding of the process. Mr. Arpith also introduced the audience to Kotlin, another programming language that holds significant relevance in modern application development. By shedding light on Kotlin's utility and integration within the context of building web applications, he equipped the audience with a broader perspective on their development toolkit.



### **Three Days workshop on “The Use of Open Sources in Recent Technologies”**

The three-day workshop is organized jointly by the Department of CSE and ISE from 27-04-2023 to 29-04-2023. Day 1 session was about Cyber Security and Blockchain Technology by Dr.Narendra V.G, professor, at MIT, Manipal, and his research scholars. In his session, he briefed about how cyber security works and what are the problems India is facing due to hacking. Mr. Manoj talked about blockchain technology, cryptocurrency, and how government can implement blockchain technology in different fields. In the afternoon session was a hands-on session on blockchain technology, Remix IDE. Day 2 morning session on Swarm Intelligence, Dr. Ahemmed Shafeeq, Associate professor, at MIT, Manipal was the resource person. He also had a hands-on session on SCI Lab. The afternoon session was about network configuration and Cisco packet tracer with a hands-on session. The session was carried out by Dr. Adesh N, Associate Professor, MIT, Manipal. Day 3 session was about APIs and Postman. Dr. Mohith P Tahiliani, NITK, Surathkal was the resource person. The speaker gave insight into the types of APIs used, methods and addresses, and the API platform Postman. He has also conducted the hands-on session on the Postman Platform

### **Hands-on Session on “Web Design-(HTML, CSS, JavaScript, ReactJs)**

The Department of Computer Science & Engineering organized a hands-on session on “Web Design-(HTML, CSS, JavaScript, ReactJs)” on June 24th, 2023. Mr. Bashid, currently working for Air Group Ventures Rep, Via ADT, Dubai as Developer Manager at Advanced Inhalation Ritual, spearheaded an instructive session that served as an initiation into the fundamental realms of web development, offering a comprehensive introduction to HTML, CSS, and JavaScript. The session adeptly elucidated how these three core technologies harmonize to construct the websites that form the backbone of the digital world.

Participants were guided through the essential building blocks of web development, commencing with HTML tags. This foundational markup language was explained in detail, equipping attendees with the knowledge to structure web content effectively. CSS, the language for styling web pages, was also demystified, providing participants with the means to aesthetically enhance their web creations.

The session further delved into the pivotal role of JavaScript in introducing interactivity to websites. Attendees gained insights into critical JavaScript concepts, including variables, functions, and program flow control. This knowledge is vital for crafting dynamic and responsive web applications. The session introduced students to React, a prominent JavaScript library tailored for building modern web interfaces. Participants were introduced to React's key building blocks, known as components, and learned how to efficiently manage data within these components. This knowledge empowers developers to create complex and interactive web applications with ease.



### **A one-day workshop on "Flutter"**

The Department of Computer Science & Engineering organized a day workshop on Flutter on July 1st, 2023. Mr. Bhargavram Udupa T, Mr. Vishwanath Hegde, Udupi, and Mr. Sai Phaneesh K H, Software Engineer at Robosoft Technologies, Udupi, were the resource persons.

The resource persons conducted a comprehensive workshop that covered crucial aspects of mobile app development using Flutter, offering participants an insightful journey into this powerful framework. The workshop comprised several key components, each contributing to a well-rounded learning experience. The participants were introduced to Flutter. They were then acquainted with the basics of the Dart programming language, which serves as the foundation for Flutter app development. A key concept covered in the workshop was that of widgets. Attendees learned how widgets are the building blocks of Flutter apps, and they got hands-on experience in creating a basic app using a variety of built-in widgets. This practical exposure enabled participants to grasp the core principles of Flutter development. Another

critical aspect discussed was state management. Additionally, the workshop demonstrated how to insert and display images within a Flutter app, enhancing the visual appeal and functionality of their creations.

The workshop's interactive nature and active participation from attendees created a dynamic learning environment, making it an ideal starting point for individuals keen to explore the vast potential of Flutter and embark on their own creative and innovative mobile app projects. Overall, the event served as a highly beneficial and empowering experience for all involved.



### **Technical talk on “Google Cloud Apigee- Creating Novel Digital Experiences on API Management”**

The Department of Computer Science & Engineering organized a technical talk on “Google Cloud Apigee- Creating Novel Digital Experiences on API Management” by Dr. Bharath Kumar M, Cloud Expert- Solution Architect, Niveus Solutions Pvt Ltd. on July 1st, 2023.

During his session, the speaker introduced the concept of an API. The importance of APIs was emphasized, highlighting their role in enabling integration, enhancing functionality, and fostering innovation within the realm of software development. This included insights into Web APIs, which serve as the foundation for many modern applications, as well as RESTful APIs and SOAP APIs, which represent different approaches to designing web services.

Several key topics were covered during the session:

1. **API as a Product:** Attendees learned how APIs can be treated as products in themselves, serving multiple functions and catering to various platforms. This perspective underscores the growing importance of APIs in modern software ecosystems.

2. **Handling Unpredictable API Traffic:** The session likely delved into strategies and best practices for managing varying levels of API traffic. This is crucial in ensuring the reliability and performance of APIs, especially in the face of fluctuating user demands.
3. **Securing APIs and Leveraging API Analytics:** Security in the context of APIs is paramount, and participants likely gained insights into securing APIs from potential threats. Additionally, the use of API analytics to monitor and optimize API performance and usage might have been discussed.
4. **Case Study: Apigee Connecting Customers and Partners:** A real-world case study involving Apigee, an API management platform, was likely presented to illustrate how APIs can facilitate connections between customers and partners, showcasing the practical application of API concepts.

