Shri Ramdeobaba College of Engineering and Management, Nagpur Department of Computer Science Engineering & Emerging Trends Session: 2024-25

GUEST LECTURE REPORT

GUEST LECTURE ON Startup: ZERO TO TEN

Date and Time of Event: 14/9/24, 2PM to 4PM

Name of Speaker: Mr. Rohit Thakur, Incubation Manager at IIT, Hyderabad

Name of Faculty In-Charge: Prof. Aarti Karandikar, Prof. S. C. Tirpude

Introduction to the Speaker:

Mr. Rohit Thakur is the Incubation Manager at the Centre for Healthcare Entrepreneurship (CfHE) at IIT Hyderabad. In this role, he focuses on fostering innovation and entrepreneurship, particularly in the healthcare sector. He plays a key role in mentoring startups, guiding them through the incubation process, and providing strategic support for early-stage businesses. With a background in both technology and entrepreneurship, he has contributed to building a strong ecosystem for startups at IIT Hyderabad.

Event Summary:

Department of Computer Science and Engineering (Data Science) organized a Guest Lecture on tStartup: ZERO TO TEN for the III semester students on 14th September 2024, from 2PM to 4PM. Conducted by Mr. Rohit Thakur, the esteemed Incubation Manager at IIT Hyderabad who offered a deep dive into the exhilarating journey of taking a startup from a mere idea to its first milestones of success.

With his wealth of experience in mentoring budding entrepreneurs, Mr. Thakur eloquently shared insights into the critical stages of startup growth—right from identifying a market need to product development, acquiring initial funding, and navigating the complex path to securing the first ten customers. His narrative was filled with rich, real-world examples, painting a vivid picture of the highs and lows that define the startup ecosystem. The session was marked by lively discussions, as Mr. Thakur engaged students in conversations about the challenges that tech-driven startups, especially in the realm of data science, encounter. He emphasized the importance of grit, adaptability, and relentless innovation in the face of adversity, leaving the students with powerful lessons on resilience and vision. The lecture not only equipped students with practical knowledge but also ignited a spark of entrepreneurial curiosity, inspiring them to imagine and pursue their own journeys from concept to reality. It was a session filled with wisdom, motivation, and a profound sense of possibility.

GUEST LECTURE ON: Never Stop Innovation

Date and Time of Event: 17/9/24

Name of Speaker: Dr. Rupesh Pais Dean, Innovation, Entrepreneurship, Startup, Incubation, RBU

Name of Faculty In-Charge: Prof. S. C. Tirpude

Introduction to the Speaker:

Dr. Rupesh Pais has done BE (Industrial Engineering), MBA (Marketing & Finance), MTech (Industrial Engineering) and PhD in Management from Nagpur University. For the last six years, he is successfully running the RGSCT-TIFAC Innovation program for MSMEs of the region. This project resulted in conducting research studies in more than 100 MSMEs. Through this program 26 Projects of innovation were conducted in various MSMEs, 8 Petents are filled and one start-up established. Apart from this, he is actively engaged in the college Business Incubator where he guides and mentors the budding entrepreneurs.

Event Summary:

Department of Computer Science and Engineering (AIML) organized a Guest Lecture on **Never Stop Innovation** for third semester students on 17th September 2024, conducted by Dr. Rupesh Pais Dean, Innovation, Entrepreneurship, Startup, Incubation, RBU. The lecture revolved around the importance of continuous innovation in a rapidly evolving world and how individuals and organizations can foster a culture that embraces change and creativity.



The speaker emphasized that innovation is not a one-time event but a continuous process. In today's fast-paced global economy, businesses and individuals must constantly adapt to new technologies, market shifts, and customer expectations. Stagnation, according to the speaker, is one of the greatest risks an organization can face. Whether in technology, healthcare, or manufacturing, companies that innovate are more likely to thrive.



Dr. R. Pais, MBA Dept. reinforcing the importance of innovation to students.

The speaker identified common barriers that hinder innovation, such as resistance to change, fear of failure, and a lack of resources. The speaker stressed that leaders need to set the tone by supporting creative initiatives, encouraging calculated risks and providing clear visions for the future, which enables their teams to push boundaries and explore new territories.

The lecture left a lasting impression by reinforcing that innovation is a mindset. Organizations and individuals must continue to push boundaries, embrace failures, and never stop striving for improvement. In today's competitive landscape, it is not enough to innovate once; the key to long-term success is to never stop innovating.

GUEST LECTURE ON: Never Stop Innovation

Date and Time of Event: 21/9/24

Name of Speaker: Dr. Rupesh Pais Dean, Innovation, Entrepreneurship, Startup, Incubation, RBU

Name of Faculty In-Charge: Dr. P. R. Pardhi

Introduction to the Speaker:

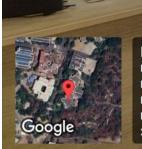
Dr. Rupesh Pais has done BE (Industrial Engineering), MBA (Marketing & Finance), MTech (Industrial Engineering) and PhD in Management from Nagpur University. For the last six years, he is successfully running the RGSCT-TIFAC Innovation program for MSMEs of the region. This project resulted in conducting research studies in more than 100 MSMEs. Through this program 26 Projects of innovation were conducted in various MSMEs, 8 Petents are filled and one start-up established. Apart from this, he is actively engaged in the college Business Incubator where he guides and mentors the budding entrepreneurs.

Event Summary:

Department of Computer Science and Engineering (AIML) organized a Guest Lecture on Never Stop Innovation for third semester students on 21st September 2024, conducted by Dr. Rupesh Pais Dean, Innovation, Entrepreneurship, Startup, Incubation, RBU. The lecture revolved around the importance of continuous innovation in a rapidly evolving world and how individuals and organizations can foster a culture that embraces change and creativity.

The key message was that innovation is not a one-time event but a continual process essential for long-term success.

- **Continuous Innovation**: Businesses and individuals must adapt to evolving markets, technology, and customer needs to stay competitive.
- Failure as a Learning Tool: Innovation often involves trial and error. Embracing failure is crucial to refining ideas and achieving breakthroughs.
- Creating an Innovative Culture: Organizations need to foster creativity, provide resources, and have leadership that encourages risk-taking.
- **Technological Drivers**: Emerging technologies like AI and machine learning are reshaping industries, making innovation a must.
- **Personal Innovation**: Individuals should strive for continuous self-improvement to stay relevant in a fast-paced world.



Nagpur, Maharashtra, India IT Block Shri Ramdeobaba College of Engineering and Management, BUPESHNAGAR, Nagpur, Maharashtra 440013, India Lat 21.176513° Long 79.061611° 21/09/24 11:18 AM GMT +05:30

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Images 1,2,3: Dr. R. Pais giving insights about innovation

The guest lecture on "Never Stop Innovation" was both insightful and motivating. The speaker successfully conveyed that innovation is the key to survival and success in today's dynamic world. Both individuals and organizations should strive to never settle, constantly seeking new ways to improve, adapt, and innovate.

<u>GUEST LECTURE ON: Introduction to Open Source and GSoC</u>

Date and Time of Event: 10.10.2024 3-4pm

Name of Speaker: Mr. Atharva Arya, Electronics and Communications, 2023 Graduate, RCOEM, Software engineer at Deep Thought Initiative (DTI)/ Open Source Developer and Google Summer of Code Org Admin in TARDIS RT

Name of Faculty In-Charge: Dr. P. R. Pardhi

Introduction to the Speaker:

Atharva Arya, Electronics and Communications, 2023 Graduate, RCOEM

Profession- Software engineer at Deep Thought Initiative (DTI)/ Open Source Developer and Google Summer of Code Org Admin in TARDIS RT for the last two consecutive years. His role includes software development for DTI, and recently made a web app that runs an ML model for STScI researchers and displays outputs to the browser. He is also responsible for all things DevOps in TARDIS RT Collaboration, where he help with GSoC as an Org Admin/mentor. He was also a participant in the same organisation in 2021 and 2022.

Guest Lecture by Atharva Arya: Introduction to Open Source and GSoC

The CSE department of Rabindra Bharati University recently organized a guest lecture on Google Summer of Code (GSoC), delivered by Atharva Arya, an alumnus of RCOEM's Electronics and Communications department (2023 graduate). Currently a software engineer at Deep Thought Initiative (DTI), Atharva is an open-source developer and has served as a Google Summer of Code (GSoC) organization admin at TARDIS RT for the last two years. His contributions span across software development, including a web application for STScI researchers, and DevOps responsibilities for TARDIS RT. The session provided a comprehensive introduction to Open Source and GSoC, catering particularly to students aiming to explore open-source contributions. Atharva started by explaining what open source means and the key objectives of GSoC, encouraging students to understand the collaborative spirit behind open-source development. He detailed the GSoC timeline, outlining each stage from selecting an organization to submitting a final project. Special emphasis was placed on choosing the right organization, advising students to consider factors such as the organization's goals, technologies used, and the level of mentorship provided. He drew from his personal experiences with TARDIS RT, sharing how he participated in GSoC in 2021 and 2022, and how he transitioned to an Org Admin and mentor role. One of the key highlights was Atharva's advice on how to approach mentors and build a strong rapport. He stressed the importance of clear communication and understanding the mentors' expectations before seeking guidance. Proposal writing was another critical aspect discussed during the session. Atharva shared his own successful proposal to illustrate how to structure and present ideas effectively. He encouraged students to write clear, goal-oriented proposals that demonstrate both technical skills and a passion for the project.

The lecture concluded with an interactive Q&A session, where the audience posed questions about the skills required for GSoC, the importance of prior open-source contributions, and the best strategies for gaining visibility in the open-source community. Atharva patiently addressed each query, providing insights from his own journey. Overall, the session was highly informative and offered valuable guidance for students aspiring to participate in GSoC and contribute to open-source projects.

GUEST LECTURE ON : Project management

Date and Time of Event: 10.10.2024 3-4pm

Name of Speaker: Mr. Piyush Agrawal, VP Products, Gliff, Bangalore.

Name of Faculty In-Charge:

Introduction

On 10th October, Mr. Piyush Agrawal, VP Products, Gliff, Bangalore, conducted an insightful session on project management, aiming to elucidate its importance and relevance in today's dynamic work environment. The session was structured to provide students with a comprehensive understanding of project management principles and practical applications.

Summary of Event:

Piyush Sir began by defining project management as the application of knowledge, skills, tools, and techniques to project activities to meet project requirements. He emphasized the significance of planning, executing, and closing projects efficiently.

The speaker highlighted how students can pursue project management skills to enhance their career prospects. He encouraged them to develop competencies in leadership, communication, and problem-solving.

To illustrate the principles of project management, Piyush Sir presented several case studies. He discussed the setbacks Facebook faced during its early stages, emphasizing poor project management decisions that led to missed opportunities. In contrast, he detailed the strategic planning and execution involved in the successful launch of WhatsApp Web, showcasing effective project management practices.

He reinforced the idea that aspiring professionals must choose to be proactive contributors in their fields. He articulated the distinction between merely reporting work and being engaged in the process, emphasizing that successful project managers are those who take initiative and drive results. This session not only provided valuable insights into project management but also motivated students to cultivate essential skills for their future careers.

Recommendations

- Students are encouraged to participate in project management workshops and seek internships that provide practical experience.

- Collaborative projects should be promoted within the academic curriculum to foster teamwork and leadership skills.

<u>GUEST LECTURE ON: Networking TOOLs (Computer Networks)</u>

Date and Time of Event: 21/10/24, 8.30am-10.30am

Name of Speaker: Mr. Atharva Deshpande

Name of Faculty In-Charge: Dr. D. Naidu

Introduction to the Speaker:

Mr. Atharva Deshpande is a Cybersecurity Analyst at VCF Cyber Solutions Pvt. Ltd., Nagpur. He is Certified in Cyber Security & Ethical Hacking, Certified Ethical Hacking(C|EH) from EC Council, Masters of Science in Electronics, Bachelor of science in Electronics He has an Experience of 2 years in Vulnerability Assessment, Penetration Testing (VAPT), Web Application Penetration Testing (WAPT), Network Penetration Testing, Digital Forensics and Security Audit & Security Compliance

EVENT DETAILS:

On 21 October 2024, a guest lecture was organized by Ramdeobaba University featuring an industry expert, Mr. Atharv M. Deshpande, specializing in computer networks. The lecture provided an indepth understanding of the core concepts related to computer networks, with a focus on practical tools and techniques used in the industry. The session covered topics ranging from OSI models to advanced tools like Wireshark, demonstrating their relevance in modern network management and security. Following points were taken.

1. OSI Reference Model

The lecture began with a discussion on the OSI (Open Systems Interconnection) model, which forms the foundation of computer networking. The speaker explained the seven layers—Physical, Data Link, Network, Transport, Session, Presentation, and Application—and how each layer contributes to the smooth functioning of network communication. The significance of the OSI model in diagnosing and troubleshooting network issues was emphasized.

The next section delved into the concept of network ports, a critical element in the transmission of data across networks. The expert explained how different applications use specific ports (e.g., HTTP uses port 80, HTTPS uses port 443) and the role ports play in network security, particularly in filtering inbound and outbound traffic.

3. APIs and Network Communication

Application Programming Interfaces (APIs) were discussed as an integral part of modern network communication, facilitating interaction between different software components. The lecture touched upon how APIs function within networks and how they are used to manage various network services, enhancing interoperability across platforms.

4. Firewalls: Traffic Management

The guest speaker provided a detailed overview of firewalls, focusing on their function in managing inbound and outbound traffic by applying predefined policies. The types of firewalls, including software and hardware-based solutions, were explained. The speaker highlighted commonly used firewalls in large-scale organizations, such as Comodo, Fortinet, and FortiGate, providing real-world examples of their applications in managing enterprise-level security.

5. Packet Sender

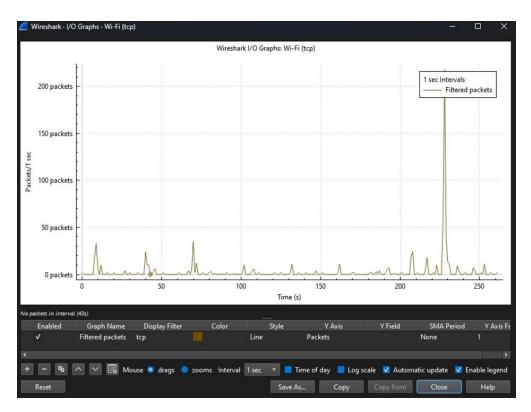
An introduction to Packet Sender, a tool used for sending and receiving packets, was given. The speaker demonstrated how network professionals use this tool for testing firewalls, routers, and networks by sending custom packets to specific ports and checking the results. Packet Sender helps simulate network traffic for diagnosing problems in real-time.

6. Packet Encryption and Decryption

The importance of encrypting and decrypting packets to ensure secure communication was underscored. The expert explained different encryption methods and how they are applied in packet transfer. Concepts such as hexadecimal to base64 to text conversions were also touched upon, showcasing their use in network security.

7. Wireshark Tutorials

The session concluded with an interactive tutorial on Wireshark, a powerful tool used for network traffic analysis. Two different environments were demonstrated:



Wireshark on Windows: The expert walked through how to filter network traffic, capture packets, and analyze the results, emphasizing practical scenarios such as identifying malicious traffic. Wireshark on Kali Linux: A more advanced demonstration was conducted using Wireshark in the Kali Linux environment, focusing on its use in penetration testing and cybersecurity.

• Geotagged pictures from the event:







The guest lecture provided a comprehensive overview of key concepts in computer networking, ranging from the basics of the OSI model to advanced packet analysis using Wireshark. Students were taught into how modern tools and techniques are applied in real-world scenarios, particularly in network security and traffic management. The lecture proved to be highly informative for both students and professionals, bridging the gap between theoretical knowledge and practical application.

GUEST LECTURE ON: Enterprise BI reporting

Date and Time of Event: 21.10.2024, 11-1pm Name of Speaker: Ms. Ketki Fating, Infocepts, Nagpur Name of faculty-in charge: Prof. Aarti Karandikar Audience: V Semester Students, CSE - Data Science

Introduction

The Department of Computer Science and Engineering (Data Science) organized an insightful guest lecture on Enterprise BI Reporting, delivered by Ms. Ketki Fating on 21st October 2024. Ms. Fating, an experienced professional in the field of Business Intelligence (BI), shared her expertise on how BI reporting drives data-driven decision-making in organizations.

Summary of Event:

During her session, Ms. Fating discussed the fundamentals of Enterprise BI Reporting, including:

Introduction to BI: The role of Business Intelligence in modern enterprises.

BI Tools and Platforms: Overview of popular tools like Power BI, Tableau, and SAP BI.

Challenges in BI Reporting: Data integration, real-time reporting, and ensuring data accuracy.

Best Practices: Tips for designing effective BI dashboards and generating actionable insights.

She also emphasized the importance of data visualization, the role of data scientists in creating value for businesses, and how enterprise-level reporting contributes to strategic decision-making. The session included a Q&A segment where students actively engaged with Ms. Fating, seeking guidance on BI tools and career opportunities in Business Intelligence.

The lecture was highly appreciated by the students and faculty for its practical relevance and interactive nature. It provided students with a comprehensive understanding of how BI reporting functions in real-world enterprise environments, preparing them for industry challenges.

GUEST LECTURE on: TOASTMASTERS CLUB

Date and Time of Event: 11.01.25, 12 PM to 1 PM

Name of Speaker: Ms. Mayuri Assudani

Name of Faculty In-Charge: Dr. P. Pardhi

Introduction to the Speaker:

Ms. Mayuri Assudani is a renowned trainer for foreign languages in India who conducts workshops on various pedagogical techniques used in teaching of French as a foreign language. She has been a Toastmaster since January 2017. In this span, she has served as Club President, Club VP Education and Club VP Membership.

Event Summary:

On 11th January 2025, Ms. Mayuri Assudani delivered an insightful guest lecture about the Toastmasters Club. The session focused on the club's mission to enhance public speaking, communication, and leadership skills. Attendees gained an understanding of how Toastmasters operates, the benefits of membership, and the structured approach to skill development through practice and feedback. The event provided a valuable opportunity for students to explore ways to improve their professional and personal communication capabilities.



The guest also threw light on the insights of the club which states that Toastmasters International is a nonprofit educational organization that builds confidence and teaches public speaking skills through a worldwide network of clubs that meet online and in person. In a supportive community or corporate environment, members prepare and deliver speeches, respond to impromptu questions, and give and receive constructive feedback. It is through this regular practice that members are empowered to meet personal and professional communication goals. Founded in 1924, the organization is headquartered in Englewood, Colorado with approximately 270,000 members in more than 14,000 clubs in 150 countries.

<u>GUEST LECTURE on:</u> Key Insights on Building a Strong Tech Career

Date and Time of Event: 6th JAN 2025, 11:00 Pm to 12:00 Pm

Name of Speaker: Mr. Jigar Patel (Microsoft Engineer)

Name of Faculty In-Charge: Dr. Devishree Naidu

Introduction to the Speaker: Mr. Jigar Patel is a highly self-motivated Full Stack Developer with over 10 years of relevant experience in the field. He has worked with some of the top companies like Amazon, MobiKwik, and Persistent, and is currently associated with Rehlat as an AVP - Software Engineering. Jigar is an expert in AWS, Google Cloud, and Azure, and has a strong command over various programming languages like Python, SQL, Javascript, and ASP.NET. He has also worked extensively with ElasticSearch, NoSQL, and MySQL, and has experience in building service-based architecture, microservices, and REST Service-based architecture with high TPS. Jigar is passionate about solving real-time business problems and building smooth experiences for customers. He leverages technology to transform the business challenges into a robust and scalable solution.

Event Summary:

The event, led by **Mr. Jigar Patel**, provided insightful guidance for students and aspiring tech professionals on how to shape their careers in the technology sector. Mr. Patel emphasized the key differences between service-based and product-based companies, highlighting that service-based companies (e.g., TCS, Infosys) focus on delivering IT services for other businesses, requiring adaptability and strong communication skills. In contrast, product-based companies (e.g., Google, Amazon) offer opportunities to innovate and work with cutting-edge technologies, demanding in-depth knowledge in problem-solving and specific tech stacks. He also stressed the importance of internships, noting that they provide real-world exposure, build industry-relevant skills, and enhance employability.





Mr. Jigar Patel explaining the importance of working on projects to students

Furthermore, Mr. Patel highlighted the significance of working on projects, particularly fullstack ones, to showcase practical skills and problem-solving abilities to recruiters. He recommended programming languages such as C++/Java for competitive programming, Python for AI/ML roles, and JavaScript for full-stack development. Mr. Patel also shared additional tips, encouraging early coding practice on platforms like LeetCode and HackerRank, maintaining a strong GitHub profile, and building a concise, tailored resume. Finally, he reminded attendees that soft skills like communication and problem-solving are just as important as technical skills and advised participating in mock interviews and group discussions to boost confidence.

GUEST LECTURE on: Self-Development and Research

Date and Time of Event: 21 October 2023, 10-11am

Name of Speaker: Mr. Kuldeep Kelkar

Name of Faculty In-Charge: Dr. Rashmi Sahu

Introduction to the Speaker:

Mr. Kuldeep is a Silicon Valley User Experience practitioner and leader. He has worked for and consulted with Start-Ups and Fortune 500 Enterprises. His journey with User Experience Design and research began in the late 1990s, during the dot-com days. Mr. Kuldeep joined UXReactor as a Senior Partner to lead the User Research and Insights practice in 2023. Mr. Kuldeep published Strengthen Your User Research Superpower, a book that helps UX professionals make an impact, influence stakeholders, and be leaders.

Event Summary:

On 21 October 2023, Mr. Kuldeep Kelkar, an expert in user research, delivered an engaging talk on self-development and its connection to research. Held at [Location], the event drew a diverse audience eager to learn practical strategies for personal growth and enhancing research skills in a dynamic field.





Mr. Kelkar shared valuable insights on fostering a growth mindset and overcoming challenges in user research. He also generously donated signed copies of his book, "Strengthen Your User Research Superpowers", offering attendees a practical resource to elevate their research skills. The event concluded with a Q&A session and networking opportunities, allowing participants to engage with Mr. Kelkar and each other, discussing key takeaways and sharing ideas. It was an inspiring and enriching experience for all involved.

<u>GUEST LECTURE on:</u> Interactive Session for Third-Year Students Regarding Placement Guidelines

Date and Time of Event: 17-10-2024, 10-11am

Name of Speaker: Final year CSE students

Name of Faculty In-Charge: Dr. P. Pardhi

Introduction to the Speaker: The interaction was specifically an experience-sharing session by the placed students of final-year students.

Event Summary:

During a recent session with senior students, valuable recommendations were shared to guide juniors in placement preparation. Emphasizing strategic and industry-specific preparation, the seniors advised tailoring efforts to meet the unique requirements of target industries and actively participating in pre placement talk Q&A sessions for critical insights. They highlighted the importance of developing a strong foundation in Object-Oriented Programming (OOP), Operating Systems (OS), and Data Structures & Algorithms (DSA), while also maintaining clarity about undergraduate projects to discuss them confidently during interviews. Students were encouraged to craft company-specific resumes, focus on accuracy rather than the number of attempted questions, and approach problem-solving with a clear and logical mindset.



Final year CSE students addressing V semester CSE students

Competitive coding, aptitude preparation, and the ability to handle tricky questions were identified as essential skills, along with ensuring honesty in resume content. Additionally, they emphasized the importance of avoiding backlogs, aiming for a CGPA of 8.5 or higher, and using Python as a secondary language while focusing on C, C++, and Java as primary options. This comprehensive advice aims to prepare students for success in the recruitment process.