**Report on IEEE PES Event: Roadmap to Internship Opportunities for 1st Year BTech Students**

**Event Title:** Roadmap to Internship Opportunities for 1st Year BTech Students

**Organizer:** IEEE Power and Energy Society (PES) Student Branch Chapter

**Date:** 31/12/2024

**Venue:** First Year Classroom

**Event Overview**

The event commenced with a warm welcome to all students by Dr. G Siva Kumar and M Medishetty Medhansh. This was followed by a structured and engaging presentation delivered by P Goutham Datta – Executive Member. IEEE MEMBERSHIP, PES MEMBERSHIP and volunteer benefits were also briefed by Dr. G Siva Kumar, Faculty advisor of PES SBC. The presentation served as a comprehensive guide, addressing various aspects of internships and providing a step-by-step roadmap tailored to students' needs. The roadmap was categorized into three major domains:

**1. Software Domain**

* **Description:** Careers in software development, data science, and AI/ML. A popular choice among students aspiring to work in the tech industry.
* **Prominent Companies:** Leading software firms frequently visiting campus, including multinational corporations and startups.
* **Key Skills:** Mastery of programming languages (Python, Java, C++), proficiency in data structures and algorithms (DSA), and foundational knowledge in Object-Oriented Programming (OOPS), Database Management Systems (DBMS), Operating Systems, and Networking.
* **Preparation Tips:** Regular practice on platforms like LeetCode, CodeForces, and GeeksforGeeks. Participation in coding contests was emphasized to sharpen problem-solving skills.

**2. Hardware/Core Domain**

* **Description:** Practical and innovative applications in electrical and electronics engineering, suited for students passionate about hardware and embedded systems.
* **Prominent Companies:** Renowned core engineering firms visiting campus placements and internships.
* **Domains:** Analog, Digital, and Embedded Systems engineering.
* **Key Skills:** Proficiency in simulation tools like PSpice and MATLAB, a robust understanding of analog and digital concepts, and hands-on project experience.
* **Preparation Tips:** Aptitude tests and technical topics relevant to analog/digital systems were emphasized, coupled with strong analytical thinking.

**3. Management Domain**

* **Description:** Organizational and strategic roles, providing opportunities for students with interests in leadership and planning.
* **Key Skills:** Strong communication abilities, leadership qualities, and proficiency in project management tools.
* **Opportunities:** Career options include management consulting, project coordination, and business analysis.

**Internship Process**

The presentation outlined a thorough explanation of the internship process, divided into several key stages:

1. **Application and Eligibility Criteria:** Guidance on understanding CGPA requirements and identifying skill sets relevant to various companies.
2. **Online Tests:** Typically include sections on DSA, CS fundamentals, aptitude, and communication skills.
3. **Technical and HR Interviews:** Tips were shared on preparing for technical interviews focused on project work and core skills, as well as HR interviews assessing personality and communication.
4. **Preparation Resources:** Recommendations included standard textbooks, online platforms, and interactive courses to build technical and analytical skills.

**Interactive Session**

The session included an engaging Q&A segment, allowing students to address specific concerns about the internship process. Discussions covered:

* The importance of CGPA.
* Strategies to balance academic commitments with preparation.
* Approaches to build a competitive edge for off-campus opportunities. Students also received practical advice on problem-solving, project engagement, and leveraging platforms for industry exposure.

**Feedback**

The event was met with enthusiastic feedback from participants. Students appreciated the structured roadmap and found the actionable insights beneficial. Many expressed motivation to adopt the outlined strategies and actively work towards securing internships aligned with their career goals.

**Conclusion**

The event successfully guided 1st-year students by demystifying the process of securing internships during their 3rd year. It emphasized the critical role internships play in career development and highlighted the importance of early preparation. The IEEE PES Student Branch Chapter reaffirmed its commitment to supporting students' professional growth through similar initiatives and resources.

**Acknowledgments**

We extend our sincere gratitude to the IEEE PES Student Branch Chapter for organizing this impactful event. Special thanks to G Siva Kumar and Medishetty Medhansh for their invaluable contributions and to the participants for their active involvement and enthusiasm.

**Hosted By:**

G Siva Kumar – Faculty Advisor

Medishetty Medhansh – Chair

K Srinivas – Vice Chair

P Goutham Datta – Executive Member

Dhruva Harish – Executive Member



