Title: Workshop and Hackathon on AI and Deep Learning

Resource Person: Mr. Govind Maheswaran

Profile: Team Lead, Artificial Intelligence, Ernst & Young, Trivandrum

Academic Profile: M.Tech, NIT Calicut

About Resource Person

Govind Maheswaran is a Data Scientist, Technology Evangelist, and Speaker. Govind has a solid academic background in computer science, through his bachelors from Kerala University and Masters from National Institute of Technology Calicut. Currently associated with Ernst and Young as the Leader of their Artificial Intelligence Practice, he is involved in creating and managing innovative solutions that tackle the business requirements of the client, in the domains of AI, Deep Learning, Intelligent Automation, Computer Vision, Natural Language processing and Virtual Assistants. Before this, he had created sorcery in the web as a freelance web developer, and had found his start-up 'Peppy Eggs Interactives'- a branding, Marketing and Creative Design Organization which focused on the Entertainment sector, which became the pioneer in introducing Kerala to Social Media Marketing. In addition to his day job, Govind enjoys being a technology evangelist, and doing speaking engagements for colleges. Govind gives talks about technical topics, and on topics bridging the academia with the industry. Govind has an interactive presentation style, in which he connects to the audiences through stories with a personal touch, and communicate the topic with utmost participation from the audience.

Report about the Workshop

Mr. Govind discussed about the Mathematical Foundations of Deep Learning. The next day Basic Hands on Session on application of Machine Learning Algorithms for understanding errors and making improvements, verification of improvement of Deep Learning over Machine Learning algorithms and understanding the working of Deep Learning algorithms were conducted. Advanced Use cases like Natural Language Processing and Computer Vision were discussed. Students were encouraged to pick their first AI project using Python and related libraries. Training and testing datasets were fetched from various sources. It was deployed using Kubernetes, Containerization and Docker, based on the student's choice.

The final day was devoted for a hackathon with participants expected to create their own AI solution within the 5-hour timeline, in groups of 4. The facilitator worked actively with all teams in the following ways.

- Give top-level topic suggestions

- Work individually with each group to refine use case

- Discuss solutions and helps teams that are stuck

- Discuss topics/intricacies that comes up during the hackathon to the larger audience.

Prizes were distributed to the winners of the hackthon.