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K.S. SCHOOL OF ENGINEERING AND MANAGEMENT

Kammavari Sangham (R) 1952

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**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

- Event name** : Techsaksham Training on Applied Artificial intelligence
- Date of Event** : 30-09-24 to 09-10-24
- Venue** : Alpha-Delta Seminar Hall, Dept of AI & DS, CS-BS lab  
CSE lab
- Number of participants** : 260
- Targeted Audience** : V Semester, Dept of AI & DS, CSBS, CSE, ECE
- Objective** : To enhance skills of students

The banner features the logos of K.S. Group of Institutions, KSSEM, and the Institution's Innovation Council. It lists affiliations with IEEE Bangalore Section and IEEE Computer Society. The event is organized by the Department of AI&DS, CSE & CS&BS in association with the Edunet Foundation. The workshop topics are Applied Artificial Intelligence: Practical Implementations and MERN Stack Web Development. Program sponsors include Microsoft and SAP. The event dates are 30th September to 9th October, 2024, from 09:00AM to 4:00PM. The location is AD Seminar Hall, G-Floor, B-Block CS&BS Lab, 2nd Floor, B-Block CSE Lab, G-Floor, A-Block.

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**IEEE** **IEEE** BANGALORE SECTION **IEEE COMPUTER SOCIETY**

**DEPARTMENT OF AI&DS, CSE & CS&BS**  
In Association with  
**edunet foundation** **Edunet Foundation**  
Organizing Workshop on  
**APPLIED ARTIFICIAL INTELLIGENCE : PRACTICAL IMPLEMENTATIONS**  
&  
**MERN STACK WEB DEVELOPMENT**

**Program Sponsors**

30th September – 9th October, 2024 AD Seminar Hall, G-Floor, B-Block CS&BS Lab, 2nd Floor, B-Block CSE Lab, G-Floor, A-Block  
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### **DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

The event was held online through Infosys Springboard platform.

Department of Artificial Intelligence organized workshop on “Applied Artificial Intelligence” for V Semester students. It was conducted by Edunet Foundation sponsored by Microsoft and SAP.

**Workshop Objectives:** The objective of the workshop is to upskill the students of educational institutions on Artificial Intelligence, its applications and enable them to take up relevant certification to accredit their learning. This will benefit student community by making them industry ready.

**Resource Person:** Mr. Sumit Sartale.

2+ years experienced data scientist proficient in Python, ML, NLP and SQL

### **Feedback:**

Feedback from students' is positive.

### Day 1: Introduction to Artificial Intelligence

Students were introduced to Artificial Intelligence (AI) concepts, including Applied AI, Machine Learning, Deep Learning, and Natural Language Processing (NLP). Ethical considerations, such as fairness and bias in AI, were discussed, followed by hands-on activities that fostered student engagement and practical learning.

**Day 2:** This day delved into Python fundamentals, covering data types, variables, operators, and string manipulation. Hands-on exercises allowed students to apply these concepts, enhancing their coding confidence.

**Day 3:** Participants revisited Python concepts like lists, tuples, dictionaries, and control statements. The focus was on hands-on programming, enabling students to apply data manipulation, analysis, and visualization techniques using Python.

**Day 4:** The workshop introduced file handling and Object-Oriented Programming (OOP) in Python. Key OOP concepts such as inheritance, polymorphism, and encapsulation were covered, along with practical exercises to solidify these concepts.

**Day 5:** Exception handling and MySQL integration were the focal points. Participants learned to manage errors in Python using best practices and gained experience in connecting Python to MySQL databases for data manipulation.

**Day 6:** The session introduced computer vision using Python's OpenCV library. Participants learned image processing techniques like image thresholding, cropping, and resizing, and engaged in hands-on exercises.

**Day 7:** Edge detection using OpenCV was the main topic, with participants learning about its applications in real-world scenarios like robotics. Practical projects involving face detection and image analysis were conducted.







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**Day 8:** The focus shifted to applied data analytics using Python. Key libraries such as NumPy, Pandas, and Matplotlib were explored, with participants gaining proficiency in data manipulation and visualization.



**Day 9:** Data visualization and analysis continued with advanced visualizations using the Seaborn library. Students applied their skills to real-time data analysis tasks, emphasizing the role of data visualization in AI and web development.



Each session balanced theoretical discussions with hands-on activities, ensuring that participants not only understood the concepts but also applied them in practical projects. The workshop successfully built a foundation for further learning in AI, web development, and data analytics.

*Workshop Coordinator*  
 Workshop Coordinator

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