Report on One-Day Workshop on AI/ML

Date of Workshop: 28 January 2025 **Venue**: Sanghavi College of Engineering

Duration: 10:00 AM – 4:00 PM

Target Audience: Second-Year Computer Engineering Students

Total Participants: 44

Workshop Coordinator: Dr. Bajirao S. Shirole

1. Introduction

The one-day workshop on Artificial Intelligence and Machine Learning (AI/ML) was organized for second-year Computer Engineering students at Sanghavi College of Engineering. The aim of this workshop was to provide a basic understanding of AI and ML concepts, introduce popular algorithms, and provide practical experience with AI/ML tools.



2. Objectives of the Workshop

The primary objectives of the workshop were:

- To introduce the basic concepts of AI and ML.
- To explain popular ML algorithms and their applications.
- To offer hands-on experience with AI/ML models using Python.
- To provide insight into future trends and career opportunities in AI/ML.

3. Workshop Structure

The workshop was structured into multiple interactive sessions, with a combination of theoretical learning, demonstrations, and hands-on activities:

Session 1: Introduction to AI/ML

- Speaker: Mr. Vaibhav Desai, Ms. Devika Aher, Mr. Hritik Jadhav
- Content:
 - o Overview of Artificial Intelligence (AI) and Machine Learning (ML)
 - Key differences between AI, ML, and Deep Learning
 - Applications of AI/ML in real-world industries such as healthcare, finance, and self-driving cars.



Session 2: Popular Algorithms in Machine Learning

• Content:

- Introduction to Supervised, Unsupervised, and Reinforcement Learning
- Overview of important algorithms such as:
 - Linear Regression
 - Logistic Regression
 - K-Nearest Neighbors (KNN)
 - Decision Trees
- o Practical examples of each algorithm and their usage.



Session 3: Career Opportunities and Ethical Considerations in AI/ML

Content:

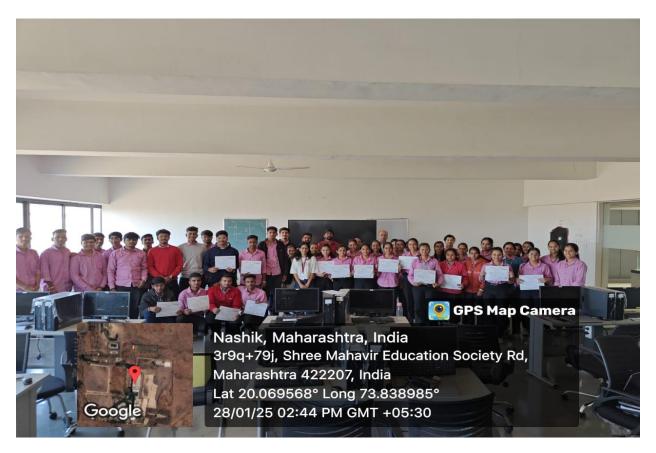
- Discussion on the vast career opportunities in AI/ML, including roles such as Data Scientist, Machine Learning Engineer, and Research Scientist.
- Ethical issues related to AI, including bias, data privacy, and accountability.



4. Key Takeaways

- Students gained a solid understanding of AI/ML concepts, algorithms, and their applications.
- The hands-on session provided practical experience in coding machine learning models, enhancing students' problem-solving skills.
- The workshop emphasized the importance of continuous learning in AI/ML due to its rapid evolution and real-world impact.

• At the end of the workshop, certificates of participation were distributed to all students who attended the workshop. The certificates were presented by the guest speaker, who congratulated the students for their active participation and engagement throughout the event.



5. Feedback from Participants

Feedback from students was overwhelmingly positive:

- Many students found the hands-on session to be the most valuable, as it allowed them to practically apply what they had learned.
- A number of students expressed their interest in pursuing further learning in AI/ML, citing that the workshop helped them clarify career options in the field.
- Some students suggested more time for deep dives into advanced topics such as deep learning and reinforcement learning.

6. Conclusion

The one-day workshop on AI/ML was a great success in introducing second-year Computer Engineering students to the exciting field of Artificial Intelligence and Machine Learning. The workshop offered a balanced mix of theoretical understanding and practical exposure, encouraging students to explore AI/ML as a career path. It also highlighted the need for students to stay updated with the evolving trends in technology.

7. Recommendations for Future Workshops

- Consider extending the duration of the workshop to cover more advanced AI/ML topics.
- Introduce a follow-up series of workshops for students interested in furthering their AI/ML skills.
- Include more real-world case studies and collaborative projects to strengthen industry-relevant learning.