MCAP306: ARTIFICIAL INTELLIGENCE & MACHINE LEARNING Lab

Hours/Week: 6   I.A. Marks: 30
    Credits: 3   Exam. Marks: 70

Course Learning Objectives: Students will try to learn,

1. To introduce basic machine learning techniques.
2. To develop the skills in using recent machine learning software for solving practical problems in high-performance computing environment.
3. To develop the skills in applying appropriate supervised, semi-supervised or unsupervised learning algorithms for solving practical problems.
4. Identify innovative research directions in Artificial Intelligence, Machine Learning and Big Data analytics.

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Course Outcomes: After completing the course, the students will be able to,

CO1: Students will demonstrate the ability to solve problems collaboratively

CO2: Students will demonstrate knowledge of artificial intelligence concepts

CO3: An understanding of fundamental concepts and methods of machine learning, statistical pattern recognition and its applications.

CO4: An ability to analyze and evaluate simple algorithms for pattern classification.

CO5: An ability to design simple algorithms for pattern classification, code them with Python programming language and test them with benchmark data sets.

CO6: Practically establish, refine and implement strategies to take the idea in to students and faculty fraternity.

CO7: Practice sustainable funding models for GRIET and related efforts

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MCAP307: Internet of Things Lab

Hours/Week: 6   I.A. Marks: 30
  Credits: 3   Exam. Marks: 70

Course Learning Objectives: Students will try to learn,

1. Understand the concepts of Internet of Things
2. Analyze basic protocols in wireless sensor network
3. Design IoT applications in different domain and be able to analyze their performance
4. Implement basic IoT applications on embedded platform

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Course Outcomes: After completing the course, the students will be able to,

CO1: Implement the impact of IoT applications and Architectures in real world

CO2: Realize the various IoT Protocols (Datalink, Network, Transport, Session, Service)

CO3: Practically implement IoT stack and be familiar with the key technologies

CO4: Interface different sensors to arduinouno and raspberry pi to read the environment data.

CO5: Implement the role of big data, cloud computing and data analytics in a typical IoT system

CO6: Practice the ICT ecosystem and enabling environment to foster IoT

C07: Practically the technologies and the standards relating to IoT.

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