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Soft Computing

Instructor

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Teaching Assistant

Email:

Department: Computer Science and Automation

Course Time: Mon., Wed., 2-3:30 PM

Lecture venue: CSA 328

Detailed Course Page:

Announcements

Brief description of the course

This course is for M. Tech and Ph.D. students in the engineering departments more for students in Computer

Science and Automation, Electrical Engineering, CDS departments.

Prerequisites

None

Syllabus

Introduction; Fuzzy sets; Neural networks; Genetic algorithms; Genetic programming; Swarm intelligence;

Rough sets; Hybrid systems; Applications especially to pattern recognition and machine learning

Course outcomes

1. Various soft computing techniques

2. Application in various areas

3. Course will help M.Tech students in their project and research students in their research

Grading policy

Assignment 10% Tests 10% Seminar 15% Term project 15%

Exam 50%

Assignments

Assignment on application of neural network, fuzzy sets, genetic algorithms and swarm intelligence to some

problems in C/C++, Java or Python.

Resources

Z. Pawlak, Rough sets, Kluwer Academic Press

David Goldberg, Genetic algorithms in search, optimization and machine learning, Pearson Education

Sadashivam and Deepa, Soft Computing