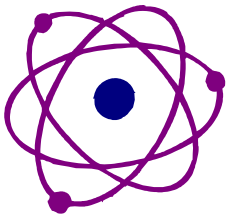
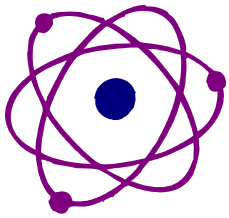


ECEN 5773 Intelligent Systems
Section: 1
CID: 16900
Fall 2001



Time: Tuesday/Thursday 10:30-11:45 AM

Place: Engineering South 302

References:
Neural Network Design, Hagan, Demuth and Beale
PWS, 1996
Fuzzy Set Theory and its Application, Zimmermann
Kluwer, 1996
An Introduction to Genetic Algorithms, Mitchell
MIT, 1996
Reinforcement Learning, Sutton and Barto
MIT, 1998

Instructor:
Professor Gary G. Yen,
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744-7743, gyen@master.ceat.okstate.edu
Engineering South 404
Office Hours: Tuesday/Thursday 8:00AM-10:00AM;
1:00PM-2:00 PM; 3:30-5:00PM or by appointment only

Objectives:
An overview of emerging biologically motivated computational intelligence paradigms and hand-on working knowledge with specific application domain in, but not limited to,

- supervised neural network- radial basis function network;
- unsupervised neural network- self-organizing map;
- derivative-free combinatorial optimization;
- feedback neural network - Hopfield associative memory;
- evolutionary computation- genetic algorithm; genetic programming; evolutionary programming; artificial life;
- fuzzy logic and its applications; and
- reinforcement learning.

Grading:

Homework Assignments on each subject covered (paper critics, literature search, mathematical analysis, numerical simulation, domain applications	**30%**
Midterm Exam: novel application	**30%**
Final Exam: proposal, final report, and oral presentation	**40%**

Drop and Add Policy; Academic Dishonesty/Misconduct; Disability; Class Website