101-2 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	人工智慧概論	Serial No. / ID	1910 / EEI2041
Dept.	電機工程學系	School System / Class	大學日間部2年1班
Lecturer	吳幸珍	Full or Part-time	專任
Required / Credit	Optinal / 3	Graduate Class	No
Time / Place	(一)89A / H726	Language	Chinese

Introduction

Introductions: This course is to provide undergraduate student an introduction to artificial intelligent. We shall talk about various evolutionary computation (GA, GP, DE), fuzzy set, neural network, swarm technologies (PSO, ACO, BFOA), intelligent agent, and biologically inspired algorithm (artificial immune systems). The related toolboxes in Matlab are used for implementation.

Outline

1. Introduction to AI/neuroscience
I. Introduction to evolutionary computation
  2. Genetic Algorithm
  3. Genetic Programming
  4. Differential Evolution
II. Neural Fuzzy System
  5. Fuzzy Set Theory
  6. Neural Network
III. Swarm technologies
  7. Particle Swarm Optimization
  8. Ant Colony Optimization
  9. Bacterial Foraging Optimization Algorithm
III. Others
  10. Intelligent Agent
  11. Artificial Immune Systems
Final Report

Prerequisite

none