99-2 大葉大學 選課版課綱

基本資訊			
課程名稱	人工智慧	科目序號 / 代號	1709 / EGR5015
開課系所	電機工程學系碩士班	學制 / 班級	研究所碩士班1年1班
任課教師	吳幸珍	專兼任別	專任
必選修 / 學分數	選修 / 3	畢業班 / 非畢業班	非畢業班
上課時段 / 地點	(三)234 / H371	授課語言別	其他

課程簡介

This course is to provide graduate student with practical understanding of the field of artificial intelligent systems. Student will develop small rule-based expert system, design a fuzzy system, explore artificial neural network and implement a simple problem as a genetic algorithm. Matlab Fuzzy Logic and Neural Network Toolbox are used in this coursed.

課程大綱

I. Introduction to knowledge-based intelligent systems
1. Introduction to AI/neuroscience (TJ_1/K_1,2) ; ITS(viedo)
2. Introduction to fuzzy systems (K_14)
3. Introduction to neural network and soft computing paradigm (K_15)
4. Introduction to Intelligent Agents (TJ_11)
II. Optimization
5. Derivative-based optimization (J_6)
6. Evolution-based computation (TJ_7,N_7)
III. Recurrent Neurodynamical Systems
7. Artificial neural network (TJ_8-9,N_6.1)
8. (Supervised Learning) Support Vector Machine (K_8)
9. (Recurrent Learning) Adaptive Resonance Theory (K_11)
10. Unsupervised Learning (N_6.2,K_12)
III. Hybrid Intelligent Systems
11. Integrated Neural Fuzzy Systems (TJ_12,N_8.1,anfis, sonfin)
12. Evolution-based Neural/Fuzzy Systems (N_8.2)
Final Examination

基本能力或先修課程

no