朝陽科技大學 097學年度第2學期教學大綱
Knowledge Engineering 知識工程

當期課號	7778	Course Number	7778
授課教師	陳榮靜	Instructor	CHEN,RUNG CHING
中文課名	知識工程	Course Name	Knowledge Engineering
開課單位	資訊管理系碩士在職專班一A	Department	
修習別	選修	Required/Elective	Elective
學分數	3	Credits	3
課程目標	本課程以人工智慧技術爲主探討知識建構與推論技術, 建立各種知識的表示法以及知識推論的技巧. 目的在培養學生如何將人的知識轉成計算機推論的知識內容以建構智慧型之系統, 內容包括 1. 智慧型知識系統簡介 2. 人工智慧技術發展3. 一階與高階邏輯推論4. 規則推論系統5.模糊規則推論6.框架系統7.案例推論與黑板系統8. 神經網路與遺傳演算法 9. 混合式推論系統10. 知識與資料探勘 11.語意網應用與討論	Objectives	This course is based on artificial intelligence system. The purpose of the course will let students have ability to transfer human knowledge to machine reasonable knowledge. The content includes: knowledge-based intelligent systems, rule-based expert system and uncertainty management, first order and high order logic, fuzzy expert model, frame-based expert system and blackboard system, case reasoning, evolutionary computation, neural network, hybrid intelligent system, data mining and knowledge discover and semantic web primer discussion.
教材	1. Michael Negnevitsky, Artifical Intelligence: A guide to intelligent Systems, Addison Weseley,2002	Teaching Materials	1. Michael Negnevitsky, Artifical Intelligence: A guide to intelligent Systems, Addison Weseley,2002
成績評量方式	書面報告或測驗: 25% 論文上台報告或期中測驗:30% 期末報告: 30% 出席: 15%	Grading	general reports or testing: 30% final reports:30% oral reports or middle test:20% attention: 20%
教師網頁	ftp://163.17.9.69		
教學內容	本課程探討相關之資訊管理技術並以人工智慧技術爲主, 建立各種知識的表示法以及知識推論的技巧. 目的在培養學生如何將人的 知識轉成計算機推論的知識內容以建構智慧型之系統, 內容包括 1. Introduction to knowledge-based intelligent systems 2 The history of artificial intelligence, or from the 'Dark Ages' to knowledge-based systems 3.Rule-based expert systems 4. Uncertainty management in rule-based expert systems 5.Fuzzy expert systems 6.Frame-based expert systems 7.case reasoning and blackboard 8.Artificial neural networks 9.Evolutionary computation 10. Hybrid intelligent systems 11. Knowledge engineering and data mining 本課程本學期將有三次英語授課 其中兩次爲交換學者一次爲老師本人	Syllabus	This course is focous on artifical intelligence system. The content includes: 1. Introduction to knowledge-based intelligent systems 2 The history of artificial intelligence, or from the 'Dark Ages' to knowledge-based systems 3.Rule-based expert systems 4. Uncertainty management in rule-based expert systems 5.Fuzzy expert systems 6.Frame-based expert systems 7.case reasoning and blackboard 8.Artificial neural networks 9.Evolutionary computation 10. Hybrid intelligent systems 11. Knowledge engineering and data mining

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