Course: Artificial Intelligence

Instructor: W.F. Lu

Course description

This course covers general knowledge representation techniques and problem solving strategies. Topics will include search, intelligent agents, game playing, rule-based systems, logic programming, semantic networks, planning, and uncertain reasoning. The aim of this course is to introduce the current range of AI-informed techniques for solving problems in computer science and biomedical research.

References

Artificial intelligence, 3rd edition
Elaine Rich, Kevin Knight
McGraw-Hill

Artificial intelligence, A modern approach, 3rd edition
Sturat Russell, Peter Norvig
Prentice Hall

Course Schedule

Introduction

Problem, problem space, and search

Problem, problem space, and search

Problem, problem space, and search

Problem, problem space, and search

Heuristic search

Heuristic search

Review

Review

Game playing

Game playing

Learning

Learning

Learning

Connectionist models

Connectionist models

Review

Final exam

Course evaluation

Passing score for graduate course is 70. In general, score is allocated between class attendance, homework, mid-term written exam, final written exam and student oral presentation. Course instructor reserves the right to adjust the grading scheme.