Artificial Intelligence Concentration

Computer Science students interested in Artificial Intelligence (AI) are encouraged to take the AI concentration courses described below. Students in other programs (CIS, SE, ECE, Math, etc) interested in AI courses or project should contact Dr. El-Sheikh for more information.

CAP4601 Artificial Intelligence

Prerequisite: COP3530 (COP3411) Data Structures and Algorithms I

Course Offered:
Spring even years (spring 2012, spring 2014) and fall odd years (fall 2013, fall 2015)

Course Description:
Introduction to Artificial Intelligence principles and techniques. Students will learn about core AI methods for solving complex problems, including search strategies, knowledge-based techniques, and agent-based systems. Topics covered include as intelligent agents, AI search algorithms, knowledge representation and reasoning, knowledge-based systems, machine learning, as well as AI applications in areas such as education and gaming.

CAP4053 AI Programming for Interactive Environments

Prerequisite: CAP4601 Artificial Intelligence

Course Offered:
Fall even years (fall 2012, fall 2014) and spring odd years (spring 2013, spring 2015)

Course Description:
Introduction to the use of AI programming methods for the development of interactive environments including robotics, computer games, educational environments, and financial systems. Design, implementation, and evaluation of intelligent systems using fundamental AI implementation techniques including agent-based architectures, machine learning methods, path-finding algorithms, and user modeling.

Students will identify an appropriate AI project topic of interest to them, and work individually or as teams to design, develop, and evaluate an AI-based system that solves the problem and integrates AI methods and concepts from the prerequisite course, CAP4601.

Additional Information

For questions or more information, please contact Dr. Eman El-Sheikh at eelsheikh@uwf.edu or 850-474-3074.

Students interested in additional AI project or research opportunities (Honor's thesis, directed study, research project, etc) are encouraged to join the AI Research Group (http://uwf.edu/computerscience/ai/) or contact Dr. El-Sheikh to discuss other AI opportunities.