CSAI - Artificial Intelligence | Grad

CSAI 5210 Artificial Intelligence with Python (3)

A background on Artificial Intelligence will be provided and the potential benefits of the technology in multiple areas will be described. Python will be introduced and ways in which it can be used to resolve AI-related questions will be discussed. Topics will include intelligent search, first and second order logic, probabilistic reasoning, planning, knowledge representation and decision making. **Prerequisite**: CSDA 5210.

CSAI 5220 Machine Learning (3)

A background and the benefits of Machine Learning will be provided, including common algorithms used in a variety of subject areas. Topics covered in this course include Supervised Learning, Unsupervised Learning, Linear Regression, Clustering, Bayesian Learning, Decision Trees, Evolutionary Computation and Neural Networks. **Prerequisites**: CSAI 5210 and CSDA 5320.

CSAI 5320 Deep Learning - Image, Video and Audio (3)

Deep Learning will be introduced and its role in Artificial Intelligence will be outlined. Topics covered include Autoencoders, Convolutional Neural Networks, Long Short Term Neural Networks, Generative Adversarial Networks and Transfer Learning. **Prerequisite**: CSAI 5220.

Course Descriptions