FALL 2019
Computer Science
Extended Campus / Distance Education

CS 491-950 / CS 591-951

Online Course

Instructor – Dr. Banafsheh Rekabdar

Special Topics: Deep Learning
(Graduate Category 1)

Deep learning is a new superpower that will let you build Artificial Intelligent systems that just were not possible years ago. This course is an introduction to the area of deep learning and data science. Students will learn the foundations of Deep Learning and understand how to build, train, apply deep neural networks, and understand the key parameters and important factors in the neural networks. Topics covered include Convolutional networks, Recurrent Neural Networks, Long Short Term Memory, Adam optimizer, and Dropout. Students may work on a project in the areas of sign language reading, music generation, natural language processing, and computer vision.

Prerequisites: CS 330 with a grade of C or better or Graduate standing.

Textbook: Goodfellow, Ian; Bengio, Yoshua and Courville, Aaron. Deep Learning. MIT press, 2016.