

Honors College 401 Research Project Presentation

Don Li

will give a talk on a mathematical literature and problems project in partial fulfillment of requirements for the Honors College Degree

"Deep Learning Algorithms"

<u>Abstract:</u> Neural networks are the engine of the current Al boom. Given recent major advancements, we give an introductory overview of deep learning and neural networks, particularly for classification tasks. Moreover, we discuss stochastic gradient descent and backpropagation, i.e., the key algorithms that underlie the training of a neural network, and discuss these algorithms from the standpoint of an optimization problem. We supplement the relevant theory with Python implementations of binary and multi-class classification neural networks.

Under the direction of **Prof. Dacian Daescu**

Thursday, June 12 at 1pm FMH 464