

Weekly Seminar

12pm - 1pm, Friday, September 27, 2019
UWM EMS E 237

A Tutorial on Deep Learning: Part I

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Abstract:

Over the past few years, deep learning has become one of the most successful methodologies in solving numerous problems that are traditionally difficult to tackle with knowledge-based approaches in the fields of computer science and many others. This tutorial will cover the basic concepts and practical use of deep learning, where most of the materials are taken from a popular online course on coursera taught by Prof. Andrew Ng.

In this talk, I will cover the first part of the tutorial on the basic building blocks of deep neural network, including neuron, loss function, gradient descent, forward propagation, backward propagation, and activation functions. Then I will discuss hyperparameters tuning (bias and variance problem, regularization, normalization, optimization algorithms, etc.). The talk will conclude by discussing some machine learning strategies.