

Old Dominion University
College of Engineering and Technology
Department of Electrical and Computer Engineering

All lectures to be held at 3:00 p.m. on Tuesdays in Kaufman 224. For more information, contact Dr. Dimitrie Popescu at (757) 683-3741 or e-mail dpopescu@odu.edu. Refreshments provided after the seminar.

Tuesday, September 20, 2016 Seminar Topic:

**DEEP LEARNING IN ARTIFICIAL INTELLIGENCE:
AN OVERVIEW**

**Mr. Mahbubul Alam, Ph.D. Student,
Department of Electrical and Computer Engineering
at Old Dominion University**

Abstract:

In recent years, the resurgence of Artificial Intelligence (AI) based techniques have shown eminent success in various research areas especially in computer vision. This resurgence is powered by a new trend in AI, specifically in machine learning, known as “Deep Learning” (DL). DL has not only been welcomed by the academic world but also widely adopted by the giant tech companies like Google, Microsoft, Apple and Facebook creating their own AI research divisions and making some impressive acquisitions (e.g. Speech recognition system in Siri, Google speech and Cortana are all based on Deep Learning techniques). DL models have the unique capability of efficiently processing raw data and extracting meaningful information from them. Consequently, these models can be utilized in various application domains as a black-box tool with very limited theoretical understanding. This talk aims to provide an overview of the recent state-of-the-art Deep Learning models and some of their notable applications.

Bio:

Mahbubul Alam is a PhD candidate in the ECE Vision Lab at ODU. He received his BS and MS degree in Computer Science and Engineering from Jahangirnagar University, Bangladesh in 2008 and 2011 respectively. He has secured highest grade in both BS and MS final examination. He was awarded “Gold Medal” for obtaining the highest Cumulative GPA in the whole University during his undergrad study. After finishing his BS, he joined as a Lecturer in the same department and taught computer engineering courses at ungraduated level for three years. Currently, he is working toward his doctoral dissertation which contributes developing novel machine learning, more specifically deep learning algorithms for solving complex computer vision problems. He has published several international research articles as first author. His research interests are deep learning, unsupervised learning, learning from small data, recurrent neural networks and high performance computing (HPC).