# COMPUTER SCIENCE RESEARCH SEMINAR 

# Recent Advances in Machine Learning: A Practitioner's Perspective 

Dr. Karthik Kuber<br>Senior Data Scientist - Royal Bank of Canada<br>Friday, April $12^{\text {th }}$ at 12 noon, Room: R15, Engineering Building


#### Abstract

We live in an exciting time; advances in the field of Machine Learning are happening at an extremely fast pace. It is widely agreed upon that such advances are possible due to an unprecedented confluence of large amounts of data, vastly improved compute power, and massive parallelization through large clusters and GPUs. All of this allows for results of large-scale ML models to be observed and iterated upon in real time for practitioners. In this talk, we shall begin by discussing a timeline of significant advances, then deep dive into a handful of selected works, and look at what made them that truly big step ahead. We'll conclude by spending some time trying to predict what the nature of the next-big-thing-in-ML will be.


Bio: Karthik Kuber is a Senior Data Scientist at RBC and an adjunct instructor of Machine Learning at York University in Toronto. He has several years of academic research as well as applied data science experience in the technology and banking sectors. His current interests are in exploring and applying various ML techniques in the context of large-scale engineering systems, with a special emphasis on building interpretable models. Previously, he was a Data Scientist at Microsoft at Redmond, WA and had received his PhD from Syracuse University in Computer Science prior to that, focusing on Evolutionary Computation. He is also an instructor and university ambassador for NVIDIA's Deep Learning Institute, has co-organised three editions of the International Workshop on Evolutionary Rule-based ML, and volunteers actively with DataKind on projects applying Data Science for social causes.

