## Machine Learning in Finance and applications <u>PIMS Distinguished Visitor Program</u> Workshop

## Friday, November 15, 2019

## Where: University of Manitoba (Room: TBA)

When: Nov.15, 2019

What is it about: Modern advancements in statistics, computational hardware and software, and availability of big data have made possible to train machines that can learn to operate as investment managers, financial risk forecasters, and traders. The objectives of this visitor program and workshop include:

- (a) Discussing how AI and deep learning (DL) influence the field of Finance?
- (b) Financial risk forecasting using neural net (NN) approach and its advantages
- (c) Training fully-connected Deep Learning NN to reproduce the Black-Scholes-Merton model.

**Who can attend/participate:** Students (Graduate and Undergraduate) from Mathematics, Statistics, Computer Science, Economics, Finance, Agricultural Economics who are interested in learning applications of Machine Learning in Finance are invited to register. Also, faculty members from these Departments are invited to register as well.

**Program and Speakers:** This is a 1-day workshop with one distinguished visitor and 4-5 Univ. of Manitoba researchers presenting on on three main theme topics to train graduate and undergraduate students from Mathematics, Statistics, Computer Science, Economics, Finance, Agricultural Economics.

**Distinguished visiting speaker: Prof. Sanjiv R. Das,** Finance, Santa Clara University **Speakers:** Dr. A. Thavaneswaran (Statistics), Dr. Ruppa K. Thulasiram (Computer Science), Dr. Alex Paseka (Finance), Dr. Julieta Frank (Agribusiness) (and <u>others to be confirmed</u>). Details of title and abstract will become available in next few days.

**Organizer**s: Dr. Ruppa K. Thulasiram (Computer Science), Dr. A. Thavaneswaran (Statistics), and Dr. Alex Paseka (Finance)