ELE829 – System Identification

• **Course Outline**
  http://www.ee.ryerson.ca/undergraduate/dcd/ele829.html

• **Key Knowledge to Be Acquired**
  Fundamental knowledge in system identification: nonparametric models in time and frequency domains, designing data collection experiments, deterministic-stochastic parametric models, least-squares identification algorithms, correlation analysis for diagnostics and model validation.

• **Key Skills to Be Mastered**
  Data collection, diagnostics, model selection, identification and validation using MATLAB. Application of theory to real-time systems (identification of a servo-positioning system).

• **Potential Careers**
  Control systems engineers, Power system engineers, Robotics engineers, Mechatronics engineers, Embedded systems engineers, System integration engineers, Instrumentation engineers

• **Potential Employers**
  Potential employment are in the following industries: automotive, aerospace, oil and gas, power generation, financial institutions, etc. Some examples: Honeywell, Johnson Controls, MD Robotics, Hydro One, Ontario Power Generation, banks (financial modeling), etc.

• **Graduate Studies**
  University of Toronto, University of Waterloo, University of BC, McGill University