MEng Design Project Announcement – 2017-18 AY

Project title: Compressive Sensing for Multi-Antenna mm-Wave Communication Systems

Brief Description of Design Project Goals:

Overview: Millimeter (mm) wave communication is widely believed to be a core component of fifth-generation (5G) wireless communication systems. The goal of this project is to use recent results in compressive sensing for multi-antenna systems operating in the mm-wave regime.

Specific MEng Contribution: The student(s) will learn the basics of compressive sensing and develop novel algorithms for channel estimation that exploit the specific structure of mm-wave channels.

ECE Field Advisor Name: Prof. Christoph Studer
  • Email – studer@cornell.edu
  • Phone – 607 255 8218
  • Office – Rhodes Hall 331

Number of MEng Students Needed: 1 - 2

Required Skills:

MATLAB or Python, and wireless/digital communication skills. It may be beneficial to take ECE 5680 in the Fall 2017.

Estimated Project Time Frame:

2017-18 Academic Year, Two (2) Semesters