**MEng Design Project Announcement – 2018-19 AY**

**Project title:**  Secure Hardware Acceleration for Efficient Blockchain

**Brief Description of Design Project Goals:**

**Overview:** The goal of this project is to develop a secure hardware accelerator that performs core parts of blockchain (crypto currency) protocols so that the security can be ensured in hardware while improving efficiency.

**Specific MEng Contribution:** The students will need to learn recent developments in the use of trusted hardware (such as Intel SGX) in blockchain protocols, and implement a dedicated hardware accelerator (in HDL) for blockchain.

**ECE Field Advisor Name:** Ed Suh  
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- Phone – 607-255-6856  
- Office – 338 Rhodes Hall

**Number of MEng Students Needed:** 1-2 students

**Required Skills:**

Background in basic computer architecture and algorithms. Experiences in hardware designs in HDL such as Verilog or VHDL.

**Estimated Project Time Frame:**

2018-19 Academic Year, Two (2) Semesters