Victoria Moran

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EDUCATION

Harvey Mudd College – Claremont, CA   Expected May 2020
Bachelor of Science in Engineering   GPA: 3.76/4.00
Dean's List (all semesters)   Major GPA: 3.79/4.00

> *Electrical Engineering Coursework* – Microprocessor Systems | Digital Electronics and Computer Engineering | Electronic and Magnetic Devices and Circuits | Experimental Engineering

> *Other Related Coursework* – Advanced Systems Engineering | Intro to Engineering Design and Manufacturing | Data Structures and Program Development | Electromagnetic Theory and Optics | Multivariable Calculus

SKILLS

Digital Systems   Circuit Design | Microprocessor Design | C | SystemVerilog | Assembly Language | HSPICE

Programming   Matlab | C++ | Java | Python | Arduino | Verilog-A | Linux | Git

Languages   English (Fluent) | Mandarin (Intermediate) | Spanish (Beginner)

Other   CAD (SolidWorks) | Machining | Modeling | Rapid Prototyping | Innovation (Patent Pending)
Technical Writing | New Product Development

INDUSTRY EXPERIENCE

HP Inc. | R&D Systems Engineer Intern   *HP San Diego* | May - August 2018
- Simplified the workflow of textile printing and reduced the time of post printing treatment from 3 minutes to < 1 second
- Demonstrated the feasibility of curing various inks on textiles with LED to optimize color intensity and durability
- Collaborated with an international team to meet product development timelines and protect intellectual property

Energize Colleges | Sustainability Intern   *City of Rancho Cucamonga* | January 2018 - May 2018
- Analyzed emissions data to create a baseline greenhouse gas inventory for Rancho Cucamonga Municipal Operations

RESEARCH EXPERIENCE

Analog Circuit Engineering Lab | Undergraduate Researcher   *HMC* | January 2018 - present
- Develop a TFET variability model in Verilog-A to simulate a TFET SRAM cell for low-power high-density applications
- Simulate phase change memory arrays to determine how selector diode quantity limits array size

Internet Security Lab | Undergraduate Researcher   *University of Nebraska-Lincoln* | June - August 2017
- Established a secure channel between communicating entities on the Interplanetary Overlay Network
- Developed a non-interactive public key exchange protocol to solve the problem of key management and distribution

PROJECTS

Toyota Motor Fuel Cell Clinic   *HMC* | Fall 2018
- Evaluate power consumption interactions between fuel cell stack and battery of passenger car Mirai
- Create model that recommends optimal power configuration for chosen mid-sized North American vehicles

Autonomous Underwater Vehicle   *HMC* | Spring 2018
- Worked with three classmates to build an underwater robot for the lab component of Experimental Engineering
- Robot navigates underwater using acoustic control to follow a beacon and measure the water's temperature and turbidity

Vehicular Child Safety Device   *HMC* | Fall 2017
- Collaborated with two peers to develop a notification system that communicates with sensors in a car seat and a driver's seat to alert parents who unintentionally forget their children in their cars

ACTIVITIES

Digital Electronics Lab Proctor – Assist students with labs to ensure concept understanding   *HMC* | August 2018 - present

Machine Shop Proctor – Supervise and guide students with machine use   *HMC* | January 2018 - present

Wellness Peer – Organize events to promote seven dimensions of wellness   *HMC* | August 2017 - present

Turbo Kickboxing Instructor – Teach biweekly classes at Claremont Colleges   *CMS Athletics* | August 2017 - present

Dorm Mentor – Serve as peer advisor for first-year students   *HMC Division of Student Affairs* | August 2017 – present

Homework Hotline Tutor – Help students with math and science by phone   *HMC* | October 2016 – present