Victoria Moran

vmoran@hmc.edu | (858)204-0327 | 11947 Dapple Way, San Diego, CA 92128
vickimoran.github.io

EDUCATION

Harvey Mudd College – Claremont, CA — Expected May 2020
Bachelor of Science in Engineering — GPA: 3.81/4.00
Dean's List (all semesters) — Major GPA: 3.89/4.00

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
- Model and 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
- Developed a public key exchange protocol to manage and distribute keys on the Interplanetary Overlay Network

PROJECTS

MIDI Pattern Visualizer — *HMC* \| Fall 2018
- Implemented a system that plays and displays a sequence of notes recorded from a MIDI keyboard
- Raspberry Pi sends notes over SPI to FPGA which stores the pattern in shift registers and interfaces to an LED matrix

Toyota Motor Fuel Cell Clinic — *HMC* \| Fall 2018
- Evaluated power consumption interactions between fuel cell stack and battery of passenger car Mirai
- Created 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