

Tess Despres

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EDUCATION

University of Washington, Seattle, WA – M.S. Electrical Engineering
Harvey Mudd College, Claremont, CA – B.S. General Engineering

Expected Early 2021
May 2018

RELEVANT COURSEWORK

Advanced Systems Engineering • Microprocessor Systems • Engineering Clinic • Autonomous Vehicles (Arduino) • Experimental Engineering • Data Structures and Program Development • Engineering Electronics • Digital Electronics and Computer Engineering • Rigid Bodies

COMPUTER AND ENGINEERING SKILLS

Oscilloscope, Python, OpenCL, ROS, Cadence, PADS, LTSpice, KiCad, C, C++, C#, Verilog, HTML, CSS, Solidworks, MATLAB, Linux command-line, Embedded development, CNC Mill, CNC Lathe

ENGINEERING EXPERIENCE

Microsoft, Full time and Internship Experience

Electrical Engineer Xbox Console

August 2018-Present

- Working on design and validation for the video output subsystem on Xbox motherboard
- Drove motherboard schematics and bill of materials for next generation Xbox console

Electrical Engineer Xbox Console Intern

May 2017-August 2017

- Created a C# application interface for debug boards
- Designed, prototyped, and produced debug circuitry for the Xbox console

IoT Windows Core Explorer Intern

May 2016-August 2016

- Worked on a three-person team to plan, develop, and build a kernel mode display driver for an Adafruit PiTFT capacitive touch screen
- Wrote and debugged C++ code to initialize the device and send frame buffers to the display

Harvey Mudd Machine Shop, Proctor

September 2015-September 2017

- Responsible for all students working in the machine and wood shop during shifts
- Managed safety protocols, and maintain a clean and organized workspace

FarmX, Clinic Team Leader

September 2017-May 2018

- Worked to implement a water saving sensor system for high yield crops in California
- Responsible for budget, schedule, and team management along with technical tasks

Digital Analog Ground Plane Research, Team member

September 2016-September 2017

- Built a board to characterize the flow of current in analog digital systems
- Provided support and designed a tutorial to optimize KiCAD use across platforms

The Aerospace Corporation, Clinic Team

September 2016-January 2017

- Worked to incorporate the NVIDIA Jetson TX1 as a payload on an Aerocube Picosatellite
- Determined effects of space environment on Jetson TX1 performance

Microprocessor Systems Final Project, Team member

September 2016- January 2017

- Used an FPGA to digitally filter songs using beat matching algorithms
- Programmed a raspberry pi in C to control a water fountain to match the beat of music

Openloop, Core team member

September 2015-September 2016

- Chosen for Harvey Mudd College's team to compete in the SpaceX Hyperloop challenge to prototype and test an ultra-high-speed transit pod
- Responsible for sensor placement, development, and testing

AWARDS & EXTRACURRICULARS

Eugene H. Kopp Scholarship, *For practice of electrical engineering at the highest levels*

Frederick N. Holliday Leadership Award, *For outstanding leadership in the Engineering Clinic program*

Harvey Mudd College Best Clinic Presentation, *For best team presentation at HMC Projects Day 2018*

Microsoft Explorer Tech Fair Champion, *Voted best intern project at end of summer fair*

Claremont-Mudd-Scripps NCAA Women's Lacrosse, *Goalie*