SAMUEL HOLLADAY

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EXPERIENCE

Zoox 2019-present
Sensor Engineer *Foster City, California*

Calibrating and validating lidar and camera sensors for self-driving car. Embedded and controls programming for calibration, electrical hardware testing, calibration data analysis, next-gen lidar evaluation, and custom sensor design.

Metawave Corporation 2018-2019
Hardware Engineer *Palo Alto, California*

On System Software team, integrated hardware components of prototype radar system to develop analog, high-frequency electronic beam steering. Lead engineer developing and testing FPGA-based beamsteering system interfacing with SPI, I2C, UART, and GPIO peripherals as well as RFICs.

UC Berkeley Salahuddin Lab 2015-2018
Undergraduate and graduate researcher for Professor Sayeef Salahuddin *Berkeley, California*

In spintronics devices lab, worked on acoustically driven and spin-torque ferromagnetic resonance experiments, designed RF waveguides and fabricated magnetic structures, and measured multilayer nanostructures with spin pumping.

Maxim Integrated 2017
Applications Engineering Intern *Colorado Springs, Colorado*

Designed and characterized circuits for multimedia serializers and deserializers in Automotive Unit of major chip manufacturer. Created power over coax boards, simulated components, and improved board power supply and regulation.

Lawrence Berkeley National Laboratory 2014-2015
Undergraduate researcher in Grid Integration Group *Berkeley, California*

Created server framework and website for MyGreenCar vechicle fuel economy app. Worked on hybrid vehicle-grid integration, creating a simulation platform to enable the optimal integration of electric vehicles with the electricity grid.

EDUCATION

University of California, Berkeley *May 2018*
M.S. in Electrical Engineering & Computer Science

University of California, Berkeley *May 2017*
B.S. in Electrical Engineering & Computer Science
Coursework: RF Integrated Circuits, Analog Integrated Circuits, Microelectronic Circuits, Microelectronic Fabrication, MEMS, Integrated Circuit Devices, Quantum Mechanics, Solid State Physics, Algorithms, Artificial Intelligence
Honors: UC Berkeley Regent's and Chancellor's Scholar, NASA College Scholarship Fund award recipient

TECHNICAL SKILLS

Programming	Python, C++, Matlab, C, LabVIEW, Simulink, CUDA, Javascript, JQuery, Git
Software	Cadence, ADS, SPICE, orCAD, AutoCAD, CST, Vivado, Diptrace, Unix, Server admin, LaTeX
Lab Experience	VNA, EMI testing, PCB testing, anechoic chamber, photolithography, E-beam evaporator

ACTIVITIES AND PROJECTS

Associated Students of the University of California (ASUC) Office of the CTO 2016 - present
Chief Engineer on Project Sensus

Led project to create portable, low-cost wireless people counter with Raspberry Pi to track occupancy of campus gyms and libraries, and upload data to web application for use by students.

Calsol: UC Berkeley Solar Vehicle Team 2013 - 2016
Data Team Lead, Webmaster (2014)

Webmaster in charge of managing the website, accounts, and web security, and Data team lead, in charge of processing and transmitting diagnostic and sensor data from the car during the competitive race.