

SAMUEL HOLLADAY

Berkeley, CA 94720

(985)-640-8234 ◇ sam.holladay@berkeley.edu ◇ samholladay.com

EDUCATION

University of California, Berkeley

May 2017

B.S. in Electrical Engineering & Computer Science

Overall GPA: 3.655

EXPERIENCE

Salahuddin Lab

2015-present

Undergraduate researcher

Berkeley, California

In spintronics lab, worked on acoustically driven and spin-torque ferromagnetic resonance experiments, conducted experimental measurements, and designed comparative materials study of nickel and ferrite crystals.

EE130: IC Devices

2016

Reader

Berkeley, California

Student reader grading assignments for Integrated Circuit Devices class, under Professor Sayeef Salahuddin.

Lawrence Berkeley National Laboratory

2014-2015

Undergraduate researcher for Samveg Saxena

Berkeley, California

Created server framework and website for MyGreenCar vehicle fuel economy app at <http://mygreencar-01.lbl.gov>. Working on hybrid vehicle-grid integration, using Matlab to create a simulation platform (V2G-Sim) to enable the optimal integration of plug-in electric vehicles with the electricity grid.

Undergraduate Research Apprenticeship Program

Spring 2014

Undergraduate researcher under Professor Alice Agogino

Berkeley, California

Worked on creating a Web application for a ride-sharing and shuttle transportation system for a community in need of public transit. Extensive web development using Javascript, JQuery, and Ajax programming.

Naval Research Laboratory

2012-2014

SEAP and USM Intern for Sergio deRada

Stennis Space Center, Mississippi

Created a comprehensive, interactive ocean modeling site to dynamically create and display data from the Navy Coastal Ocean Model (NCOM) using Python scripts at <http://www7330.nrlssc.navy.mil/GOMMS/>. Built the websites back-end scripts, which stored and manipulated model data for use in plots and analyses. In 2014, developed an iPhone app as part of an adaptive climatology project.

COURSEWORK

Computer Science: Algorithms, Artificial Intelligence, Discrete Mathematics and Probability Theory, Machine Structures, Data Structures, Structure & Interpretation of Computer Programs

Electrical Engineering: Microelectronic Circuits and Devices, Microelectronic Fabrication, Integrated Circuit Devices, Signals and Systems, Introduction to Microelectronic Circuits

Science: Quantum Mechanics, Physics: Mechanics and wave motion, Physics: Electricity and magnetism, General Chemistry

Mathematics: Multivariable Calculus, Linear Algebra and Differential Equations, Calculus

TECHNICAL SKILLS

Programming	Python, Java, C, C++, Matlab, LabVIEW, Scheme, Objective-C
Web Development	Django, Javascript, PHP, JQuery, Ajax, Git, Google Maps API, Node.js, Yeoman
Languages	English (Native), Spanish (Proficient), Portuguese (Proficient)
Software	DipTrace, SPICE, AutoCAD, Unix, iOS development, Server administration, L ^A T _E X

ACTIVITIES

ASUC Office of the CTO 2016 - present
Chief Engineer on Project Scanner Darkly (2016)

Led project to create portable, low-cost wireless density scanner 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)

In 2014 appointed team 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. Worked as a freshman on the Electrical Team within the Power subteam, focusing on storing and distributing power from the cars solar cells safely and efficiently. Focused on Battery Management System (BMS) development and Hall-effect current sensing.

Cal Ultimate Frisbee Team 2014 - 2015
Member of Ultimate Frisbee team.

LeaderShape Institute retreat January 2016
Week-long program with 200 other UC Berkeley engineers to learn team-building, leadership, and consideration for social and ethical issues in engineering.

SOL Study Abroad: Granada, Spain Summer 2015
Participated in six-week study abroad program with SOL Education Abroad in Granada, Spain. Took classes in Spanish and Hispanic American Culture and Civilization, as well as Spanish language, with the University of Granada.

FIRST Robotics: Team 1912 2006-2014
Member of high school FIRST robotics team, helping with robot building, community outreach, public demos, administration, and leadership. Titles include captain of Chassis team, 2-time robot driver, and Secretary.

HONORS

2013	UC Berkeley Regents and Chancellors Scholar
2013	NASA College Scholarship Fund award recipient
2013	High school valedictorian