

**Lowell Paige Bander**  
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## EDUCATION

University of California, Los Angeles — Henry Samueli School of Engineering & Applied Science  
*Bachelor of Science, Computer Science.* Sept 2012 - June 2016. GPA: 3.0

Venice Senior High School — Foreign Language Magnet  
*High Honors, LAUSD Seal of Biliteracy in Spanish.* Sept 2008 - June 2012. GPA: 4.1

## SKILLS

**Languages:** C, C++, C#, Python, PHP (Hack), SQL, L<sup>A</sup>T<sub>E</sub>X, Spanish, Java, JavaScript (Angular, React), HTML, CSS (novice), R, Octave. **Tools:** Linux/Unix CLI, Django/Tastypie, Heroku, Vim, Git, Flask, Xcode, Visual Studio, MPLAB, SolidWorks, LabVIEW, EAGLE, SVN. **Elbow grease:** Breadboarding, Soldering, Machining.

## WORK EXPERIENCE

**Software Engineer,** Facebook.  
*October 2016 - Future*

**Summer Immersion Program Teacher,** Girls Who Code. Introducing 20 high school girls to the field of computer science by way of projects in Scratch, Python/Pygame, Arduino, & HTML/JS/CSS.  
*June 2016 - August 2016*

**Software Engineering Intern,** Facebook. As a member of the Culture Infrastructure team, developed a tool which generates expressive query UI's for structured data. Patent pending.  
*June 2015 - September 2015*

**Instructor,** The Coding School. Teaching Python, HTML, & CSS to middle school students.  
*Sept 2014 - June 2016*

**Avionics Systems Integration Intern,** SpaceX. By building an LDAP JSON API & collaborative task manager, I learned about API's, server stacks, Django/Tastypie, and AngularJS. Learned of client-side & server-side web design paradigms. For Crewed Dragon control panel, developed a microcontroller serial interface to an existing C++/Qt flight simulator, iterated on hardware design in Visio, soldered prototypes, and did trade study against PCB version.  
*Sept 2013 - Dec 2013*

**Hardware Emulation Intern,** Northrop Grumman Space Technology. Developed GUI to parse ASIC RTL simulation data & generate test scenarios in an FPGA emulation environment. Learned Verilog HDL and became familiar with the following tools: Questa/ModelSim, Xilinx ISE & ChipScope.  
*July 2013 - Sept 2013*

## EXTRA CURRICULARS

**Hacker, Mentor & Organizer,** Hackathons. Mentored at the high school hackathons HackGenerationY and Code:Roosevelt. Hacked on Pebble/iOS (link) at PennApps 2014. Built Acc!dont (link) at HackDuke 2014; won the Best Microsoft Azure Hack for Social Good prize! Built MyoPong (link), using an Oculus Rift and Myo at Dub-Hacks 2014. Built LACHats (link), at Facebook SoCal Hackathon 2014. Built a UCLA API (link) at HackSC 2014.  
*March 2014 - September 2015*

**Powerlifter,** UCLA Powerlifting Team. Current one-rep maximums: 200lb bench press, 380lb squat, 405lb deadlift.  
*Oct 2014 - June 2016*

**Ambassador,** UCLA Henry Samueli School of Engineering and Applied Science. Serving as the face of the School of Engineering by coordinating events and providing tours for alumni, prospective students, and their families. Managing and automating tour scheduling with Python/Flask-MongoRest/Heroku.  
*May 2014 - February 2015*

## EXTRA CURRICULARS, cont'd

**Web Developer,** Daily Bruin Online Department. Gaining web development skills, assisting in web production, visualizing data.

*Jan 2014 - Oct 2014*

**Application Developer,** Simul8 Group — UCLA Library. Developing applications to better the educational environment of UCLA students, such as a UCLA API and QA prototype.

*Jan 2014 - June 2014*

**Corporate Outreach Director,** Engineering Society of UCLA. Coordinated sponsorship and operations for Engineering Welcome Day, Engineering Leadership Conference.

*May 2013 - Oct 2013*

**Avionics & Launch Operations Team Lead,** UCLA AIAA Rocket Project. Ran cold flow & hot fire diagnostics to refurbish HyPE 1B2 (Hybrid Propulsion Experiment) Rocket. Authored diagnostic documentation regarding ball-valve failure and pressure transducer electromagnetic interference.

*Sept 2012 - Oct 2013*

**Lab Technician / Research Assistant,** UCLA Bouchard Laser Lab. Aided in construction, calibration, & use of hardware, software for atomic force microscopy, optically detected magnetic resonance imaging of N2 vacancy diamonds with applications in quantum computing, IC imaging.

*May 2013 - Aug 2013*

**Command and Data Handling Subteam,** UCLA ELFIN CubeSat. Implemented communication protocol for interface between PICs and the avionics of the spacecraft. Developed LINUX Ground Station Equipment software in C++, coded UART & I2C comm. protocol in C.

*Feb 2013 - June 2013*

**Hockeybots Fabrication Team,** UCLA ASME Combat Robotics. Machined aluminum components and assembled electronics for Hockeybot. Competed in RoboGames. Generated SolidWorks CADs and translated them into schematics for machining.

*Oct 2012 - June 2013*

**Electrical Engineer,** UCLA IEEE Open Project Space (OPS). Learned and implemented fundamentals of electronic design from lectures and hands-on projects. Soldered, breadboarded, coded, and CAD-ed electronics components for multiple projects.

*Sept 2012 - June 2013*

**Cyclist,** UCLA Cycling Team. Rode with the team on rides up to 70mi in length and up to 3,500ft of climb.

*Sept 2012 - June 2013*

**Optics Engineer,** COSMOS UCSD. Awarded the 2012 Gordon Research Center Leadership Award for best team research project: Determining the Electrical Output Characteristics of Organic Dye-Sensitized Solar Cells Under Varying Load Resistance.

*July 2011 - July 2011*

**A-Team Member,** Venice Senior High Science Bowl Team. Fast-paced team competition testing knowledge of Physics, Astronomy, Chemistry Biology, Mathematics, etc. Practiced daily to cover significant amounts of material largely independent of teacher Instruction.

*Sept 2010 - June 2012*

**Counselor & Council Member,** Oakgrove Camp. Worked with a small group of peers to organize and fundraise for biannual retreat for 150 students to build community and discuss personal issues such as Sexuality & Gender Identity, Suicide & Depression, & Family.

*Sept 2010 - June 2012*