

Andy Gu

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EDUCATION	University of Southern California , Los Angeles, CA Bachelor of Science in Computer Science and Computer Engineering GPA: 4.00 Courses: Linear Algebra and Linear Differential Equations, Data Structures and Object Oriented Programming, Discrete Methods in Computer Science, Introduction to Embedded Systems, Writing 150 Complete by December 2015: Introduction to Photography, Introduction to Algorithms and the Theory of Computing, Principles of Software Development Graduate – Top 10 Ranked Student (GPA: 3.99, 4.61 Weighted) Saint Francis High School , Mountain View, California National AP Scholar – AP Calculus AB, AP Calculus BC, AP Statistics	<i>Graduates May 2018</i> <i>May 2014</i>
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SKILLS AND EXPERIENCE

Programming Languages: C, C++, Java, Python, SQL, LaTeX

Hardware Design: Arduino Uno

Passing Experience: HTML, CSS, Javascript, JQuery

Los Alamos National Lab , Cyber Futures Lab, Los Alamos, NM, Research Intern <ul style="list-style-type: none">Manipulated DNS, Squid, and netflow logs to create a metric for determining the privacy risk of database queries.Wrote a SQL privacy “optimizer” for automating the suggestion of better, privacy-preserving database queries given user queries in data-sharing applications.Presented results to Department of Homeland Security, Colorado State University, and USC representatives; currently writing paper with mentor on discoveries.Working as a research intern under Dr. Boris Gelfand and the RetroFuture project	<i>May 2015-August 2015</i>
University of Southern California , Introduction to Programming Course, Course Producer <ul style="list-style-type: none">Selected as a course producer based on academic and course performance in first semester courses. Held office hours and lab sections for introductory students and facilitated course grading.	<i>August 2014-Present</i>
Analysis of Network Traffic Lab , Information Sciences Institute, Marina Del Rey, CA, Research Intern <ul style="list-style-type: none">Wrote Python scripts to automatically generate maps of Internet outages using the Matplotlib library given data from edge network probingWrote interactive Javascript websites mapping outage geolocations over multiple 24-hour time periods and parsing probe resultsRead Perl code and wrote equivalent Python scripts to parse probe results of /24 blocks of the InternetHelped researchers perform Internet measurement and analysis to better facilitate outage detectionWorked as a research intern under Dr. John Heidemann while keeping a log of weekly progress	<i>September 2014-Present</i>
University of Southern California , Introduction to Computing Course, Course Grader <ul style="list-style-type: none">Selected as a course grader based on academic and course performance in first semester courses. Graded midterms, homework, and project essays while checking for plagiarism during the semester.	<i>January 2015-May 2015</i>

PROJECTS

Death Clock

- Created a Halloween-themed Android application at the 2014 TrojanHacks Hackathon – it took in behavioral data and displayed average life expectancy based on lifestyle choices chosen from a drop-down menu. Won 4th place out of 18 teams.
- Learned basic Android programming principles to personally create a screen that returned and processed the results of these data.

My(o) Cookbook

- Wrote a dynamic recipe using the Myo API to detect stirring and chopping gestures to progress through a digital cookbook for users.
- Independently learned the Javascript interface / myo.js library to track basic cooking gestures. Won best Myo hack at LA Hacks 2015.

HONORS/ACCOMPLISHMENTS

- Trojan Scholar Society and National Society of Collegiate Scholars, Member – 2014-2015
- IBM Watson Memorial Scholarship Recipient, Presidential Scholarship Recipient, USC Gregory Scholarship Recipient – 2014-2015
- W.V.T. Rusch Engineering Honors Program Member, Viterbi School of Engineering Deans List – 2014-2015