# Alexander S. Rosengarten

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**EDUCATION** 

University of California, San Diego, La Jolla, CA

Graduated June 2016

B.S., Cognitive Science (Major GPA: 3.64) and Computer Science (Major GPA: 3.61). Overall GPA: 3.44

TECHNICAL SKILLS

| Experience | Language                         | Technology                            |
|------------|----------------------------------|---------------------------------------|
| Proficient | ARM Assembly, C/C++, HTML/CSS,   | Adobe Creative Suite, Android Studio, |
|            | Java, Javascript, Matlab, Python | Angular.js, Arduino, Git, Ionic, Unix |
| Learning   | Ocaml, R, Scala, Verilog         | Postgres SQL, Spring MVC, SVN         |

# WORK EXPERIENCE

Software Engineering Intern

March 2016 - Present

Ingenu, San Diego, CA

- Developing single-page web application with AngularJS framework. Have ample experience writing controllers, services, factories, directives, and filters.
- Setup unit test runner (Karma). Writes unit and integration tests with Jasmine and Protractor.
- Optimizing application load time via minimizing file sizes, lazy loading, and CDNification.

Software Engineer

December 2015 - June 2016

Guardiome, La Jolla, CA

- Principal Front-end Engineer at 23andMe-like, genetic privacy company.
- Developed Python based GUI for Helixa, a genome privacy and exploration tool (Python).

Mobile App Development Intern\*

June 2015

Illumina, La Jolla, CA

- Worked on Hybrid Android App front-end on BaseSpace team (Angular.js, Ionic, Typescript).
- \*Left internship early for medical reasons.

Paid Research Assistant

June 2013 - September 2015

Natural Computation Laboratory, UCSD Dept. of Cognitive Science, La Jolla, CA

- Developed BrainTag: open source neurofeedback game for children with Autism (Arduino, C).
- Wrote data visualization and machine learning toolbox for open source brain-computer interface system (Python, Java, C, Javascript).

Computer Science Tutor

April - June 2013, August 2014

UCSD Computer Science Department, La Jolla, CA

- Spring 2013, Matlab Programming: Tutored students, debugged code, graded exams and assignments.
- Summer 2014, Systems Programing: Tutored students in C and ARM Assembly programming course, implemented on Raspberry Pi. Found errors and debugged code (ARM, C, Raspberry Pi).

### CLASS PROJECTS

Forward 135 - Full Stack Developer

April - June 2014

Server-Side Web Applications Course, La Jolla, CA

- Built a full-stack architecture for efficient change propagation from the server all the way to the client as a part of a research and class project. Worked in a team of three. (Javascript ES6, PostgreSQL
- Core idea of project: only send the changes to a database to each client via WebSockets (Javascript ES8, Webpack, PostgreSQL Triggers and Materialized Views, Socket.io).
- https://github.com/bfalk8/forward135

In-Ear EEG - Software Team Member

April - June 2015

Embedded Systems Project Course, La Jolla, CA

- Worked in team to create In-Ear EEG device for people with epilepsy.
- Wrote machine learning code with a partner to detect presence of epileptic seizures (Matlab, OpenBCI).
- Built server that stores 20 minutes of brainwave data once seizures are detected (Python, SQLite).

#### COURSEWORK

- Advanced Data Structures
- Advanced Machine Learning
- Algorithms

• Neural Networks

- ullet Compiler Construction
- Computer Vision
- Server-Side Web Applications

- Operating Systems
- $\bullet$  Programming Languages

# EXTRA-CURRICULAR ACTIVITIES

Founding Member, Data Science Student Society Summer Research Scholar, Qualcomm Institute/Calit2 President, Cognitive Science Student Association Coordinated Cognitive Science Conference

November 2014 - September 2015 June - August 2013 August 2012 - January 2014 April 2013