

# Andrew EDWARDS

## PERSONAL DATA

---

PLACE AND DATE OF BIRTH: hidden

PHONE: hidden

EMAIL: hidden

## WORK EXPERIENCE

---

FEB 2017-PRESENT | Software Engineer at LIGHTHOUSE AI, Palo Alto  
Developer of the natural language search and command interface for the flagship product of Lighthouse AI. Additionally I am involved in more general back-end engineering efforts.

JUL 2015-FEB 2017 | Software Engineer at IBM Almaden Research Center, San Jose  
*Watson Core Technology*  
Distributed systems and infrastructure engineering for a number of cloud based machine learning services. My team developed core components for the Natural Language Classifier, Retrieve & Rank, and Conversations services. My focus was on the automated lifecycle management service for the machine learning models: executing training jobs, storing the models, starting the prediction runtimes, etc. I was also concerned with operational visibility of our distributed system. Our team interfaced directly with the algorithms team to ensure our service was using the latest and best modelling techniques, and to feedback performance improvements / experiment with new system designs.

APR-AUG 2014 | Software Engineering Intern at IBM Silicon Valley Labs, San Jose  
*Rational PurifyPlus*  
Worked in close cooperation with the PurifyPlus team, whose product provides dynamic program analysis. Designed an automated test suite of cross platform shell scripts, specifically for database applications using the product, to expand coverage and facilitate the reproduction of customer reported bugs. I also developed command line tools and scripts to improve the existing automation system and aid testers and developers.

JUN-AUG 2013 | Summer Intern at NASA Jet Propulsion Laboratory, Pasadena  
*Guidance, Navigation, and Control (GNC)*  
Performed statistical error analysis on the Honeywell MIMU, an inertial measurement unit being considered for the future mission Comet Surface Sample Return (CSSR). A major project of the GNC team was the Autonomous Landing and Hazard Avoidance Technology (ALHAT), a sensor suite to make real-time landing decisions to expand the number of potential landing sites. Under the guidance of my mentors, I analyzed the quality of measurements from the MIMU in MATLAB to experimentally assess the limitations of dead-reckoning with state-of-the-art hardware. I was exposed to signal processing, Kalman filtering, and mathematical modelling.

SEP 2012 - MAR 2013 | Teaching Assistant at UC SANTA CRUZ  
SEP 2013 - DEC 2013 | *Honors Calculus*  
Advanced and fast paced course for students who excelled in high school AP calculus. Approached the subject from a historical perspective, introducing new techniques in the order they were discovered. Led problem solving sessions, provided individual tutoring through office hours, graded, and wrote homework solutions.

## EDUCATION

---

JUNE 2015 Bachelor of Science in COMPUTER SCIENCE, *highest honors*  
Bachelor of Arts in MATHEMATICS, *highest honors*  
**University of California** at Santa Cruz  
GPA: 3.84

## PROGRAMMING SKILLS

---

Experienced: Java, Python, C,  $\LaTeX$ , Unix, SQL  
Working Knowledge: Clojure (a Lisp), C++, Matlab, JavaScript, HTML, WebGL, R

## RELEVANT COURSEWORK

---

### Computer Science

Data structures, algorithm analysis, operating systems, computer architecture, compilers, databases, functional programming, machine learning, artificial intelligence, video game A.I., scientific computing, independent research on  $k$ -SAT solvers.

### Math

Calculus, linear algebra, complex analysis, chaos theory, abstract algebra, probability and statistics, topology