

Education

University of Colorado Boulder

B.S. Computer Science
B.S. Applied Mathematics
College of Engineering & Applied Science

Expected Graduation: May 2017

Cumulative GPA: 4.0

Relevant Courses

Data Structures, Computer Systems, Software Engineering Methods and Tools, Algorithms, Principle of Programming Languages, Matrix Methods, Applied Probability, Database (Fall 2015), Markov Processes and Monte Carlo Simulations (Fall 2015), Numerical Analysis (Fall 2015)

Technical Skills

Languages and Technologies (by proficiency)

Experienced: Python, Java, Javascript **Proficient:** Django, NodeJS, HTML, CSS, Bootstrap **Able:** BASH Scripting, jQuery, C++, Scala, Mathematica **Exposure:** SQL, MATLAB, MongoDB

Software

Linux, VirtualBox, Eclipse, EMACS, Git, Visio, Tableau

Work Experience

Google Intern (Summer 2015)

- Worked on the AdWords team

Research Assistant (October 2013 – Present)

- Wrote NodeJS tool to analyze EBird data set and presented it at CU's 2015 Discovery Learning Apprenticeship Symposium
- Created command line tool using NodeJS and Google Cloud Storage to manage multiple data sets
- Wrote Java program to generate G-Code for Sikuli-Bot
- Presented Sikuli-Bot at UIST 2014 demo session

Projects

UIST Student Competition (October 2014)

- Worked in a group of three to create an application that allows the visually impaired to tell whether different household devices are on through light sensors.
- Awarded 2nd place for most useful application.
- Designed the user interface and software for reading information from the sensors.
- Presented application to a panel of judges at a demo session.

ExpenShare (Fall 2014)

- Created a website that keeps track of shared group expenses for the class Software Engineering Methods and Tools.
- Practiced agile method with three other group mates.
- Implemented using the Django framework.
- Repository at: <https://github.com/Brennan-M/ExpenShare>

Colorado Center for the Blind Makey-Makey Workshop (June 2014)

- Assisted in running a workshop that taught basic computer science and circuitry to visually impaired kids.
- Gave feedback on software installation and on the teaching plan for the class.
- Participated in teaching the class.

Independent Projects: To see independent projects including games, web applications, and more visit <https://github.com/IanChar>

Honors and Extracurricular Activities

Dean's List (Fall 2013, Spring 2014, Fall 2014, Spring 2015)

Mathematical Competition in Modeling Successful Participant (Spring 2015)

Hack CU (Spring 2015)

2nd Most Useful at UIST Student Competition (October 2014)

International Baccalaureate Diploma (2013)

President of Science Olympiad (2011 – 2012)

Organized meetings and got our high school's team ready for competition.

National Honors Society (2011 – 2013)

Participated in a number of community service activities such as building a fence and organizing a Trick-or-Treat Street for local communities.