

JUSTIN CHAVEZ

juscha1@umbc.edu • (585)-880-0339 • <http://www.linkedin.com/in/justinlchavez> • <https://justinchavez.github.io/>

EDUCATION

University of Maryland, Baltimore County (UMBC)

B.S., Computer Science GPA: 3.82/4.00

Minor in Mathematics, Minor in Bioinformatics and Computational Biology

Baltimore, MD

Expected May 2017

Relevant Coursework:

- Data Structures
- Object Oriented Programming
- Programming Languages
- Statistics for Engineers
- Assembly
- Introduction to Artificial Intelligence
- Discrete Mathematics

SKILLS

Programming: (Proficient): Python, C++ ,R,

(Prior Experience): MATLAB, D3.js, HTML, CSS, JavaScript

Software: (Proficient): UNIX, Emacs, Spyder, Brackets, Git

(Prior Experience): Firebase API, Autodesk

RESEARCH EXPERIENCE

Summer Research Intern

Broad Institute of MIT and Harvard

Summer 2015

Nine week summer research internship within the Regev Lab, a large biomedical research group

- Parsed 980 breast cancer patient samples through Python NumPy arrays and utilized matplotlib to display statistics
- Utilized R to implement a Fisher's exact test on breast cancer data to predict genetic interactions
- Designed with Autodesk and 3-D printed a holder for a homemade Arduino spectrophotometer

Summer Research Intern

University of Maryland, School of Medicine

Summer 2014

Initiated a project to program and implement a system for returning aggregate results to Biobank participants

- Condensed 112 pages of research publications into an annotated bibliography and spreadsheet highlighting relevant information for the Biobank project
- Created and administered a 43-question survey for feedback about a Hospital startup project
- Supported purpose of each survey question with the previously created research publication spreadsheet
- Presented final research results in 3 oral settings and 2 poster forms

PROJECTS

Developer

Lecture Learning

Application that utilizes the Firebase API to improve the classroom or workshop experience

- Integrated the Firebase API into self-built HTML websites to function as a frontend for the application's interface
- Utilized the Firebase Real Time Database to instantly inform and record student's questions for the instructor
- Constructed a timeline using D3.js to showcase where students had the most questions for lecture improvement

Project manager/Developer

PaLT (The Path Least Taken)

Application that crowd sources unique locations in nature to encourage conservation of the environment

- Coordinated a team of three to develop the application during the Bitcamp 2015 hackathon
- Developed Python code to script and parse location information from Google Sheets
- Created a Google Chrome extension for a frontend to enter location information and display other entered locations

Founder

Student Government Association (SGA) Initiative Tracker

Project started to help the SGA members organize their initiatives and bring more transparency to their projects

- Oversaw planning and development of a prototyped initiative tracker during Hack UMBC 2014
- Proposed and received a funding of \$1,400 to develop the application
- Currently overseeing testing of the initiative tracker on a sample of SGA members for feedback

LEADERSHIP EXPERIENCE

Peer Mentor, Computer Science

Fall 2015

Team Captain, Recreational Soccer

Summer 2014

Volunteer Coach, Walter Johnson High School Science Olympiad

Fall 2013-Present

HONORS

- Meyerhoff Scholar
- National Security Agency (NSA) Scholar
- Phi Kappa Phi Honor Society
- Golden Key International Honor Society