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Github: <https://github.com/JuanbiB>

Education:

Oberlin College, Oberlin, OH
Major: Computer Science

Bachelor of Arts Candidate 2018
Current GPA: 3.66

Relevant Courses Taken

- ❖ Introduction to Computer Science, Data Structure, Systems Programming, Programming Abstractions, Calculus, Discrete Math, Game Design, Computer Architecture, Computer and Information Security, Machine Learning and Data Mining

Skills

- Python, Java, C, C#, C++
- HTML, CSS, Bootstrap
- Git, Emacs, Linux, MacOS, Windows, Data Structures
- Interpersonal skills: sociable, work well with others, active learner

Work Experience

Software Engineer Intern at Google

May 2017– August 2017

- ❖ Performed improvements to a large-scale system testing framework used by the storage teams in Technical Infrastructure (Bigtable, Spanner, Colossus) to enhance usability and debuggability.
- ❖ Extended the current global logging framework to provide a more centralized and controlled workflow.
- ❖ Implemented a testing template that allows developers to perform an arbitrary amount of operations per second on a their system under test.
- ❖ Decreased time between development iterations by speeding up test initialization by a margin of ~60%.

Engineering Practicum Intern at Google

May 2016 – August 2016

- ❖ Re-wrote backed server for a network statistics dashboard, resulting in a 5x speedup.
- ❖ Fixed various bugs and implemented several new features for the dashboard.
- ❖ Designed, implemented and launched a new machine troubleshooting aid, that gathered information from two dozen systems and presented the results in a single central location, improving productivity.
- ❖ Added support for new networking protocols to a multi-node traffic generator used for performance testing.
- ❖ Contributed over 2500 lines of code to the Google codebase.

Software Developer for Oberlin Environmental Studies Department

Oberlin, OH February 2016 - Present

- ❖ Part of a team responsible for the maintenance and development of the Oberlin Environmental Dashboard, an interactive online system put in place to ‘Educate, Motivate, Empower!’
- ❖ Goals include raising awareness of the usage of resources around the city of Oberlin by monitoring these in real time and putting them on display.
- ❖ <http://environmentaldashboard.org/>

Head Student Technician for Computer and Printer Maintenance for Oberlin CIT

February 2015 – December 2015

- ❖ Responsible for troubleshooting, diagnosing and repairing HP printers on campus.
- ❖ Performing hardware and software repairs on HP laptops.

Software Projects

DNS Cache Poisoning Simulation

Oberlin, OH – December 2016

- ❖ Discussed, planned and implemented a DNS cache poisoning simulation alongside two other students as part of the final project for Computer Security (CS 364).
- ❖ Written in Java.
- ❖ <https://github.com/JuanbiB/DNS-Cache-Poisoning>

Machine Learning for Optimal In-Game Performance

Oberlin, OH – November 2016

- ❖ Planned, implemented and trained a Q-Learning algorithm to provide the most optimal succession of abilities a player should perform to maximize their combat performance in the MMORPG, World of Warcraft.
- ❖ Final project for Machine Learning and Data Mining (CS 374).
- ❖ Written in Python.
- ❖ <https://github.com/JuanbiB/Rotation-Optimization-WoW>

Exca-Mage

Oberlin, OH – May 2016

- ❖ 2D game built using the Unity engine for 361 Game Design course along with three other team members.
- ❖ Responsible for game mechanics, implemented mainly using the Unity physics engine.
- ❖ Over 7k lines of code contributed, written in C#.
- ❖ <https://github.com/JuanbiB/ExcaMage>

Awards

DIS Award of Academic Excellence in Computer Science

Languages

- ❖ Fluent in English, Spanish and Portuguese