

EDUCATION

Computer Science | Music (m) 08/2016 – 05/2020
University at Buffalo, NY

GPA: 4.0/4.0

WORK EXPERIENCE

Research Aide | Developer 05/2019 – present
Dept. of Computer Science, University at Buffalo, NY

- Led the design of the auto-grading code for an ethical routing project for ~280 students funded by the Mozilla Foundation (among others) for the Responsible Computer Science Challenge [Python]
- Designed and implemented an efficient routing simulator, causing a 40% improvement in runtime

Teaching Assistant 08/2017 – present
Dept. of Computer Science, University at Buffalo, NY

>>> Algorithms

- Developed the autograder for an NP-Complete reduction coding assignment [Python | C++ | Java]
- Appointed as the Piazza (online discussion forum) lead, brought the response time down to 6 min
- Provided comprehensive (97%) test coverage [PyTest]
- Fixed existing bugs in the auto-grading software

>>> Data Structures

- Conducted recitations and office hours, supported the course Piazza and provided debugging support [C++]

>>> How The Internet Works

- Supported recitations, mentored students and provided debugging support [JavaScript | SQL]

Research Assistant 04/2018 – 04/2019
Motion Simulation Lab, University at Buffalo, NY

- Constructed a virtual model for autonomous vehicle research, and led the creation of an environment for training drivers [Unity3D | C#]
- Produced heightmaps by encoding elevation data in PNG files [Python]

Mathematics Tutor 09/2017 – present
Math Place, University at Buffalo, NY

AWARDS

- #3 on the UB ACM leaderboard for Advent of Code
- 2018 Grace W. Capen Award recipient
- Top student contributor for the Piazza pages of ten Computer Science courses
- Top 250 out of 42000 scholars at the WSC Tournament of Champions hosted at Yale University
- #1 @ Wired, #2 @ Cord 'n Blend, #4 @ Untapped

PROJECTS

babel-ar 02/2019
* Winner @ BrickHacks *

- ASL to text translator for AR smart glasses [Python]
- Won the Best Use of 5G Currencies in Immersive Media award, sponsored by Verizon

spotify-sharp 07/2019

- Designed and developed a web app for playlist creation using all songs by an artist, or songs of a specific tempo [Python | Flask | JavaScript | jQuery | Redis]
- Leveraged caching to speed up average response time from an order of minutes to seconds
- Used the OAuth2.0 security model for authentication

ub-lost-and-found 12/2016

- Developed a web application to facilitate easy broadcasting and subsequent retrieval of lost items [PHP | SQL | HTML | CSS | JavaScript | Bootstrap]
- ~3300 total impressions (Google Search Console)
- 82 lost items successfully recovered out of 272 items posted till date

roseate-engineering 07/2019

- Constructed a website for an electrical consultant [Python | Flask | HTML | CSS | Bootstrap]
- Client reported an annual revenue growth of 23.7%
- 4.2% click-through rate till date (Google Search Console)

the-unbored 06/2019

- Built a recommender system for the Bored API based on user traits extracted from tweets [Python | GraphQL]
- Improved accuracy by implementing a scoring system for quantifying user personalities to the point where the top recommendation for Bill Gates based off of his tweets was to start a charity

ubhacking 05/2017

- Aided in the construction of the FAQ admin panel and authentication pages for the UBHacking website [Python | Flask | HTML | CSS | Bootstrap]

math-place-scheduler 04/2019

- Engineered a web application to improve the mechanism for exchanging shifts in the Math Place [Python | Flask | SQLAlchemy]

SKILLS

Proficient: Python | Flask | PyTest | Bootstrap | git | REST APIs
Intermediate: C++ | Java | C | JavaScript | HTML | CSS | Unix
Familiar: Bash | C# | SQL | jQuery | AWS | GCP | Docker