

## 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 AoC'18  
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