

EDUCATION

Computer Science | Music (m)
University at Buffalo, NY

05/2020

GPA: **4.0/4.0**

TECHNICAL SKILLS

Proficient: *Python | Flask | PyTest | Bootstrap | git | REST APIs*

Intermediate: *C++ | Java | C | JavaScript | HTML | CSS | Unix*

Familiar: *Bash | C# | SQL | jQuery | AWS | GCP | Heroku*

WORK EXPERIENCE

Research Aide 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, leading to a **40%** improvement in runtime

Teaching Assistant 09/2017 – 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

- Supported the construction of a virtual model for autonomous vehicle research [*Unity3D | C#*]
- Generated 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'18**
- 2018 **Grace W. Capen Award** recipient
- Top student contributor** for **10** course Piazzas
- Top **250** out of **42000** scholars at the WSC Tournament of Champions hosted at **Yale University**
- #1** @ Wired, **#2** @ Cord 'n Blend, **#4** @ Untapped

HACKATHON PROJECTS

inkblot 11/2019
* 2x Winner @ HackPrinceton'19 *

- Won "**Best Overall Hack**" (sponsor: **Princeton**) and "**Best Use of Google Cloud**" (sponsor: **Google**) among **52** projects at **Princeton University**
- Created a data visualization tool for therapists using sentiment analysis on video frames in conjunction with speech recognition on the audio
- Manipulated and processed raw audio [*pydub*] to sync with video frame data
- Integrated multi-processing for high-latency API requests on the server [*Python | Flask | Google Cloud*]

project-casa 09/2019
* 2x Winner @ BigRedHacks'19 *

- Ranked **1st** (sponsor: **WayFair**) and **2nd** (sponsor: **IBM**) among **67** projects at **Cornell University**
- Processed user-submitted addresses [*Python | Flask*] and recommended nearby houses [*Google Cloud*] less susceptible to natural disasters
- Set up and deployed the server [*IBM Cloud Foundry*]
- Designed and implemented the UI [*HTML | CSS*]

babel-ar 02/2019
* Winner @ BrickHack'19 *

- Won the **Best Use of 5G Currencies in Immersive Media** award (sponsor: **Verizon**) at RIT
- Created an ASL-text translator for AR glasses [*Python*]
- Leveraged an ML model to convert the video of people performing ASL to the corresponding text [*scikit-learn*]

hypertension-tracking-network 09/2019
* Finalist @ MedHacks'19 *

- Ranked in the top 3 teams (track: **Global Management of Chronic Disease**) at **Johns Hopkins University**
- Conceived a web application to assist NGOs in targeting resources towards locations where hypertension is highly prevalent [*Python | Flask | HTML | CSS*]
- Populated a map using marker overlays to display possible clusters [*JavaScript*]

bread-secured 11/2019
* Winner @ UBHacking'19 *

- Won "**Best UiPath Automation Hack**" (sponsor: **MLH**) at **University at Buffalo**
- Developed a job application tracker by leveraging the Gmail API to detect changes in application status using NLP [*Python | Flask | Google Cloud AutoML*]

soil-ent 10/2019
* Winner @ MHacks'19 *

- Won "**Best Domain**" (sponsor: **MLH**) at **UMichigan**
- Real-time status monitoring of soil health through a dashboard based on moisture sensor data
- Processed sensor updates through a server and relayed them to the UI [*Python | Flask*]