

Harrison Zhu

Atlanta, GA

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Education

Georgia Institute of Technology

August 2019 - May 2023

Candidate: B.S. in Computer Science

Atlanta, GA

- Relevant Coursework: Design of Algorithms, Data Structures and Algorithms, Database Systems, Machine Learning, Objects and Design, Object-Oriented Programming
- **GPA: 4.0**; Faculty Honors for 5 semesters.

Work Experience

Microsoft

May 2021 - August 2021

Software Engineering Intern

Atlanta, GA

- Implemented a compute and networking diagnostics platform for new servers in the Azure Dedicated ecosystem.
- Designed a system to track and log information during cloud resource allocation using Azure Services.
- Aggregated and coordinated data sources from multiple teams across Azure Dedicated into a unified metrics UI.
- Contributed maintainable code that consistently passed unit tests and code reviews from senior engineers.
- Established tooling for engineers that significantly reduced the time to mitigate issues and supplemented that tooling with documentation that was praised by principal engineers and architects.

Georgia Institute of Technology

May 2020 - Present

Undergraduate Teaching Assistant: CS 1332 (Data Structures and Algorithms)

Atlanta, GA

- Collaborated with a team of 30 co-TAs to grade assignments and create recitation guides for over 600 students.
- Coordinated bi-weekly office hours and answered questions concerning course content, homeworks, and exams.
- Held weekly recitation sessions and managed student questions during lectures.

Projects

Data Structures and Algorithms Visualization Tool

- Fixed algorithm implementations in the open-source CS 1332 visualization tool used by 600+ students.
- Created visualizations using JavaScript, React, and the USF animation API.
- Implemented feature requests that increased the tool's effectiveness in helping students visualize data structures and algorithms as well as in helping instructors teach concepts.

Squiggle

- Implemented a front-end interface for a restaurant load-balancing web application during HackGT7.
- Employed React, JavaScript, and CSS to create and style React components for use in the interface.

String Instrument Image Classification

- Designed an image recognition machine learning model that distinguishes between instrument images with `fastai`.
- Tuned a convolutional neural network for use in transfer learning between the ImageNet and instrument datasets.
- Deployed the model as a web app using Render, HTML, CSS, and JavaScript.

Skills

Programming Languages Java, Python, JavaScript(Node.js), CSS, HTML, C#, SQL/MySQL
Technologies Git, \LaTeX , Jupyter Notebooks, React, Numpy, PyTorch, scikit

Honors & Awards

- 2020 **CS2340 Top Scorer**, Scored the highest out of 104 students in **CS2340** (Objects and Design)
- 2019 **Finalist**, National Merit Scholar - Southern Company Scholarship