Harrison Zhu

Atlanta, GA
(317) 919-9018 | hzhu359@gatech.edu | hzhu359 | hzhu359

Education

Georgia Institute of Technology — *Atlanta, GA*
CANDIDATE: B.S. IN COMPUTER SCIENCE — *Aug. 2019 - (Expected) May 2023*
- Relevant Coursework: Intro to AI, Objects and Design, Data Structures and Algorithms, Intro to Object-Oriented Programming, Discrete Math, Linear Algebra
- GPA: 4.0

Chattahoochee High School — *Johns Creek, GA*
SUMMA CUM LAUDE GRADUATE — *Aug. 2015 - May 2019*
- Relevant Coursework: AP Computer Science A
- GPA: 4.0

Skills

Programming Languages	Java (proficient), Python (proficient), CSS (intermediate), HTML (intermediate), JavaScript (basic)
Technologies	Git (intermediate), LaTeX (intermediate), fastai/PyTorch (intermediate), GIMP (intermediate), Final Cut Pro (intermediate)

Experience

Ultimate Software — *Atlanta, GA*
SOFTWARE ENGINEERING INTERN — *May 2020 - Aug. 2020*
- **Internship offer accepted, but deferred due to the COVID-19 pandemic.**

Georgia Institute of Technology — *Atlanta, GA*
UNDERGRADUATE TEACHING ASSISTANT: CS 1332 (DATA STRUCTURES AND ALGORITHMS) — *Jan. 2020 - Present*
- Assisted in the grading of course projects and exams.

UNDERGRADUATE TEACHING ASSISTANT: PHYS 2211 (INTRO PHYSICS I) — *Jan. 2020 - Apr. 2020*
- Led and organized instruction during lab sections, managed equipment, and graded assessments.

Projects

String Instrument Image Classification — *Jul. 2020*
- Used the fastai library on top of PyTorch to build and refine a machine learning model that distinguished between instruments (specifically between violins and cellos).
- Adapted, tuned, and exported the ResNet-34 convolutional neural network for use in transfer learning between the ImageNet dataset and the custom instrument dataset.
- Modified template HTML, CSS, and JavaScript code in order to deploy the image classification model as a web app using Render.

Cover Type Prediction — *Oct. 2019*
- Used the scikit-learn, pandas, and numpy libraries to predict and analyze the type of tree in a forest given a list of over 50 attributes.
- Visualized and discovered patterns and clusters within the dataset using the Seaborn library.
- Adapted a Random Forest model in order to classify cover types in forests.

Georgia Tech Ping-Pong Website — *Oct. 2019*
- Contributed to a website that tracked when ping-pong tables were in use around the Georgia Tech campus.
- Formatted the website's main table using the HTML link element to access the W3.CSS framework.
- Used the W3.CSS framework to dynamically adjust table size, add table shading, format assets, and format buttons.
- Created JavaScript functions to change color of table elements using onclick events and the id property.

Honors & Awards

2020	**CS2340 Top Scorer**, Scored the highest out of 104 students in **CS2340** (Objects and Design)	*Atlanta, GA*
2019	**Finalist**, National Merit Scholar - Southern Company Scholarship	*Atlanta, GA*
2018	**Finalist**, Georgia Governor's Honors Program	*Rome, GA*