

Adelaide Zhang

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EDUCATION

- Dec 2022 **Master's in Computer Science**
New York University, Tandon School of Engineering (GPA: 3.9)
Selected Coursework: Software Engineering, Algorithms & Data Structures, Databases,
Operating Systems, Computer Graphics, Computer Vision, Machine Learning, Mechatronics
- May 2017 **Bachelor's of Fine Arts in Theater (Sound Design/Engineering)**
Carnegie Mellon University, College of Fine Arts

SELECTED PROFESSIONAL EXPERIENCE

- Oct 2022 - June 2023 **Research Assistant, NYU Music & Audio Research Laboratory / New York, NY**
Led data collection for a pilot study regarding subway noise levels, covering 30 NYC subway stations
- Collected audio level data and real-time annotations, and incorporated metadata, resulting in a comprehensive dataset of 32K observations
 - Utilized **Python** and **R** to perform statistical analyses and determine patterns of loudness
- Sept 2017 - Oct 2019 **Software Engineer, The Santa Fe Opera / Santa Fe, NM**
Developed and maintained software for Electronic Libretto System, enabling simultaneous display of translated opera titles on ~2300 networked single-board computers
- Created **Linux** application using **C++** and **Qt** for database editing and real-time performance control
 - Created user-friendly patron interface, cross-compiled for **Raspberry Pi** based hardware
 - Wrote **Bash** scripts to query units, start remote processes, and perform functionality tests
 - Documented progress during the development process and wrote user guide for future operators

PROJECTS & OTHER WORK

Budget Tracking App, personal project

- Used **Next.js** and **TypeScript** to create a budget tracking web-application, allowing users to add expenses, create budgets, and view spending trends and meta-statistics
- Created user interfaces with **Tailwind CSS** and synced user data using Google **Firebase**

Section Leader - Code in Place, Stanford University

- Volunteered to lead a weekly session as part of a global intro to programming course in **Python**
- Taught coding basics and led practice problems with a class of 15

Shortlist, NYU Software Engineering Term Project

- Collaborated to create a web app (**Django** and **Vue**) to help incoming high school students find suitable NYC public schools using NYC OpenData statistics, hosted with **AWS**
- Implemented testing with Django and Vitest, and CICD with **Github Actions**

Stellar Classification, NYU Machine Learning Term Project

- Classified visible night sky bodies as stars, quasars, or galaxies using SDSS observational data
- Implemented **Machine Learning** techniques (KNN, random forest, and AdaBoost) in **R**

Vaccination Scheduling App, NYU Databases Term Project

- Developed match-making algorithm to schedule patients and providers using their availabilities, locations, and preferences while prioritizing higher-risk patients, backed in a **MySQL** database
- Used **Express** and **EJS** to create lightweight web portal for users to submit info and track appointments

SKILLS & CERTIFICATIONS

Languages: Python, JavaScript, TypeScript, Bash, C++, R, SQL

Tools/Frameworks: Git, Qt, Linux, React, Next.js, Vue, Firebase, Agile (Scrum)

Certifications: Codepath Certificate in Cybersecurity (Spring 2022)