

SHENG HUANG

MIT CS Undergrad

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EDUCATION

Massachusetts Institute of Technology - B.S. GPA: 4.7 / 5.0

Spring 2024

- **Completed Coursework:** Computational Architecture; Discrete Math; Data Structures and Algorithms; Fundamentals of Programming; Embedded Systems; Multivariable Calculus
- **Fall 2022:** Linear Algebra; Design and Analysis of Algorithms; Artificial Intelligence

EXPERIENCE

MIT EECS - Researcher / Software Developer

Summer 2022

- Designed algorithms to filter and sort n-grams from 10TB of metadata, which created comprehensible data.
- Implemented data filter by extracting metadata frequency from Google Books JSON API.
- Optimized software by implementing caching, leading to 50% reduction in execution time.
- Reduced file storage by 75% by utilizing unique file format and ASCII characters which led to faster load.

Ek Kadam Aur - Data Science Intern

Summer 2022

- Established a system on collecting and interpreting data for disabled students in a classroom setting.
- Utilized data structures and object oriented programming which lead to an overall 20% execution speed increase.
- Engineered and designed GUI interface for easier access and interpretation of student data.

MIT Material Science - Research Software Developer

Spring 2021

- Established algorithms for cataloging and comparing chemical data for unique compounds.
- Designed graphs for calculations, which lead to a better informative visual about the reactivity.
- Optimized algorithms by utilizing different data structures, leading to increased runtime efficiency by 20%.

Personal Projects

Personal Weatherman - C++; Arduino; JSON API; Rest API

Summer 2022

- IOT device that scraps and displays data from weather API.

Real Life Mario Kart - C++; Arduino; Python; SQLite

Spring 2022

- Mario Kart inspired RC car racer with real time communication to Python server and physics simulation using ESP32.

Restaurant POS System - Python; SQLite

Summer 2021

- Software that digitizes and displays menus and stores previous customer information.

Languages and Tools

Python; C++; Java; HTML; CSS; Assembly; Minispec; SQLite

Visual Studio; Vim; REST API; JSON API; Jupyter Notebook; Markdown; Latex