1 Cedar CT APT N227
Baldwinsville NY 13027
Online Portfolio

Sheng Huang

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Employment

Undergraduate Researcher — **MIT EECS** — **Summer 2022**

- Designed and programmed algorithms to create and sort ngrams from upwards of 10TB of metadata.
- Implemented online API integration by creating tool which extracts important metadata from APIs.
- Optimized running time by 50% by implementing file caching, leading to 50% reduction in running time.
- Reduced file storage spaces by 75% by utilizing different file format and different ASCII characters which led to faster file read / load / write speeds.
- Created and designed GUI interface for easier use of algorithms.

Data Science Intern — **Ek Kadam Aur** — **Summer 2022**

- Created system on collecting and interpreting data for disabled students in a classroom setting, leading to a newer style of teaching methods for certain students.
- Engineered and designed software that contains all the student's information in one place for easier access and interpretation of student data as a whole or as a single student.
- Reduced student information file storage by utilizing different file format, leading to faster file loading speeds.

Research Software Developer — **MIT Material Science** — **Spring 2021**

- Created algorithms and graphs for processing chemical data for different compounds, leading to a better informative visual about the reactivity of the compound.
- Optimized speed of algorithms by implementing different data structures, which increased speed by 20%.
- Published code along with graduate student research for the utilization from other colleges / research offices.

Education

Boston, MA — **Massachusetts Institute of Technology** — **Fall 2020 – Present**

- B.S.E. in Computer Science and Electrical Engineering. **GPA: 4.7 / 5.0**.
- Undergraduate Coursework: Computational Structures; Math for CS; Intro to Algorithms; Fundamentals of Programming; Embedded Systems; Multi-variable Calculus;

Technical Experience

Projects

- **Restaurant POS System** (2021). Digitizes restaurant menu which in turn created a fast and efficient working environment for both customers and managers. Python; SQL-Lite
- **Performance Data Analyzer** (2022). Designed and engineered a data analyzer / cleaner. Application identifies relevant / important information and categorizes data. Python;
- **Real Life Mario Kart** (2022). Inspired by Mario Kart on the Switch, designed and created a real life version of Mario Kart by software and hardware. C++; Arduino; Python; SQL-Lite; ESP32;
- **Personal Weather Man** (2022). Created a personal "weather man" that scrapes data from weather API for accurate weather information by means of software and hardware. C++; Arduino; API; ESP32;

Languages and Technologies

- C++ (experienced); Java (prior experience); HTML (fluent); CSS (prior experience); Assembly (prior experienced); Minispec (prior experienced); SQL-Lite(prior experience); Python (expert);
- Visual Studio; Vim; Nano; Database; Online API;