Steven Xia

EDUCATION

University of Michigan College of Engineering, Honors Program **Ann Arbor, MI**
Bachelor of Science and Engineering in Computer Science: GPA: 3.94/4.0 *April 2024*
Coursework: Data Structures and Algorithms, Database Management Systems, Web Systems, Advanced Operating Systems, Parallel GPU Programming, Theory of Computation, Computer Architecture

University of Michigan Ross School of Business **Ann Arbor, MI**
Business Minor *April 2024*
Coursework: Accounting, Economics

EXPERIENCE

University of Michigan, College of Engineering **Ann Arbor, MI**
Instructional Aide for EECS 484: Database Management Systems *August 2022 – Present*

- Work with Professor H. V. Jagadish and a team of 6 Instructional Aides to operate an advanced-level Database Management Systems course of 300 students
- Teach weekly discussion classes of 30+ students to reinforce conceptual understanding
- Host 1-on-1 office hours to answer questions on class material, homework, projects, and exams
- Create homework and exam problems and host group review sessions to go over those problems

CyberCube Analytics **New York, NY**
Data Analyst Intern *May 2022 – August 2022*

- Wrote Python algorithms to pull and filter cyber risk data, update the company PostgreSQL database hosted on AWS, and perform queries to match vulnerabilities to client companies
- Worked with the new Data Collection team; created and managed AWS S3, ECR, ECS, EventBridge, SQS, and RDS resources that improved localization of data
- Migrated AWS resources to a new AWS account and set up new infrastructure using Terraform

PROJECTS

Michigan Aeronautical Science Association Rocket Project Team **Ann Arbor, MI**
Avionics Engineer *September 2021 – June 2022*

- Developed and debugged GUI for the flight data-viewer that led to three-fold increase in data accuracy for the team's new 50,000 ft. liquid bi-propellant rocket, written in Python with PyQt5
- Researched an automated unit testing framework with CMake for the flight controller firmware

FakeBook – Simulated social media database, storing information about users, friendships, photos, events, cities, albums, etc. Implemented in both Oracle SQL*Plus and MongoDB.

Chess – User inputs moves in chess notation to the command line, and program outputs new graphical representations of the board. Rejects and re-prompts user on illegal moves.

Maze Solver – User chooses depth-first or breadth-first search to find a path out of any 3D rectangular maze containing walls, floor tiles, and elevators.

SKILLS

Languages: C++, C, Python, Java, JavaScript, HTML, CSS
Database: Oracle SQL*Plus, PostgreSQL, MySQL, MongoDB, JDBC
AWS: ECR, ECS, EC2, RDS, SQS, S3, EventBridge, Terraform, boto3
Technologies: STL, Docker, Linux, Git, PyQt5, MATLAB, CMake, CUDA, Microsoft Office