Zachary Lee Yi-Hong

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SUMMARY

Self-motivated and hardworking senior in a BS Computer Science program. Eager to practice my passion in software to work in a collaborative environment, leveraging software solutions for business needs.

EDUCATION

University at Buffalo, The State University of New York   *Expected May 2023*
Bachelor of Science, Computer Science
Related Coursework: Intro to Microprocessors, Operating Systems, Modern Algorithms
CGPA: 3.75/4.0

EXPERIENCE

Software Engineer Intern   *Sep 2022-Present*
Spawwn
- Developed APIs for data collection, storing, and retrieval, and for messaging.
- Implemented search algorithms for efficient querying based on applied search criteria.
- Enhanced/Integrated database collection and optimization to hold videos.

Teaching Assistant for Algorithms and Complexity   *Aug 2022-Present*
CSE Department, University at Buffalo
- Held office hours and graded for a Junior level Algorithms and Complexity analysis course. UB's CSE331.

Open-Source club Contributor   *Aug 2022-Present*
Make-Open-Source
- Contributed to a university open-source club's Python based Classic-RPG style game engine.

Computer Science Undergraduate Tutor   *Jan 2022-May 2022*
TASS Center, University at Buffalo
- Tutored in UB's CSE115, CSE116 and CSE220. Freshmen and Sophomore year mandatory CS courses.

PROJECT EXPERIENCE

Project Fines [NodeJS, MongoDB, Heroku] [Independent Project]   *June 2022-Sep 2022*
- Led a team of 2 in the development of a traffic infringement fine system involving police, users, and administrators.
- Single-handedly conceived, architected, and built the backend from scratch.

Notify Weather [Python] [Hackathon Project]   *Apr 2022*
- Designed and implemented a push notification system on desktop that sends recommendations for dressing for the weather at a user defined time every day.

Pintos [C]   *Jan 2022-May 2022*
- Led a team of 3 and contributed to a team project to build the Pintos Operating System.
- Attained full scores on all tests (120+) given.

Beginner friendly Shell [Golang][Independent project]   *Sep 2022-Present*
- Planning and developing a Shell catered for novice Shell users.
- Features are traditional UNIX-like with innovative ideas for an intuitive experience, focusing on OO design principles.

Pool allocator [C]   *Oct 2021-Nov 2021*
- Implemented a working clone of C's standard allocators - malloc, palloc, and realloc.
- Executes some UNIX commands such as ls, and single-thread applications like vim.

TECHNICAL SKILLS

Languages preferred: C, Python, Golang, NodeJS
Tools/Technologies: GitHub, GDB, Linux OS, MongoDB, Heroku, Debuggers, VMs,