Yi-Hong Lee

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EDUCATION

University at Buffalo, The State University of New York *Aug 2021-May 2023*
Bachelor of Science, Computer Science **CGPA:** 3.7 / 4.0
Coursework: Software Engineering Concepts, Operating Systems, Modern Algorithms, Computer Security, Data Science

EXPERIENCE

Software Engineer Intern, *Spawnn* *Aug 2022-May 2023*
- Collaborated closely with the CEO to establish more than 80% (18+ components) of the Backend architecture, concentrating on scalability and maintainability.
- Led development of an automated test tool, using JS testing frameworks and Python scripting, cutting testing time by 50%.
- Supervised integration of 20 approved API endpoints with Frontend team and troubleshooted blockers by developers.
- Coded more than 50% Backend code and facilitated 50+ code reviews in an Agile environment. Transitioned to Full Stack in 2 weeks and coded 10+ Frontend features using Next.JS and Typescript, contributing to 15% of Front-End codebase.
- Spearheaded company into delivering an Alpha release stage in 4 months, releasing to over 20+ professional collegiate gaming organizations; highly recognized for impact and effort in development and leadership.

Algorithms and Complexity Teaching Assistant, *CSE Department, University at Buffalo* *Aug 2022- May 2023*
- Conducted office hours and grading for a Junior year Algorithms and Complexity analysis course, involving 300 students.
- Coached students in understanding abstract algorithmic concepts, including divide and conquer, graph, dynamic programming, and stable matching algorithms.

Open-Source Developer, *Make-Open-Source* *Aug 2022-Mar 2023*
- Coordinated 5 new features and addressed issues at UB's open-source club's Python Classic-RPG style game engine.
- Introduced 3 new core features such as Potions and Money, and classes such as Health and Speed.

PROJECT

Creds [Full-Stack Engineering] *[Next.JS, Prisma, PlanetScale, Shadcn.UI]* *Jul 2023-Aug 2023*
- Engineered a user friendly and secure secrets manager, designed to reduce pain points of sharing secrets in software engineering, increasing team efficiency in sharing environment variables by 40%.
- Achieved an average 93% score on Google Lighthouse on performance, accessibility, and SEO.
- Onboarded 120+ users and managing 1000+ individual secrets.

NoSequelDB [Backend Engineering] *[Go, Docker]* *Mar 2023-Jul 2023*
- Replicating a NoSQL Document DB similar to MongoDB, with 10+ DB APIs usable in Go.
- Architected 100% of the database and database APIs; achieving a 150-millisecond average latency per API.

Next Portfolio Template [Full-Stack Engineering] *[TypeScript, Next.JS, TailwindCSS, DaisyUI]* *Mar 2023-Apr 2023*
- Constructed a Full-Stack portfolio template with 6 features, parsing a custom JSON file into a responsive UI website; achieving an average TTI score of 2540 milliseconds.
- Integrated ease of scalability of content, through effective use of efficient pagination and high decoupling.

Web Hosted Password Manager [Full-Stack Engineering] *[Go, MongoDB, Railway]* *Dec 2022-Mar 2023*
- Conceptualized and implemented a Full-Stack password manager in 2 weeks, focusing on security and ease of maintenance while leveraging industry standard protocols such as AES and RSA to safely communicate transactions.
- Open-sourced this project and wrote 2 detailed technical documents, reducing ramp-up time by 40%.

Project Fines [Backend Engineering] *[NodeJS, Express.JS, MongoDB]* *Jun 2022-Sep 2022*
- Led a team of 2 in development of a Full-Stack traffic infringement fining system.
- Conceived, architected, and developed 100% of the Backend, prioritizing a robust database and codebase design; focusing on code modularization, readability, and maintainability; cutting development time by 20%.

SKILLS

Languages: Golang, TypeScript, Python3, JavaScript, C
Tools/Technologies: GitHub, PlanetScale, Linux OS, MongoDB, Prisma ORM, Hadoop, Jira, Elasticsearch, Docker, Next.JS, NodeJS, SQL, ElectronJS, OOP, ReactJS, TailwindCSS, DaisyUI, Vercel, Scrum, Shadcn.UI, JSON, Bash, Spark
Technical concentration: Full Stack development, Backend development, Web development, Application development
Certifications: AWS Certified Developer Associate (Ongoing)