

Ziyi (Zoe) Yang

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EDUCATION

Duke University

Class of 2024

Master of Engineering in Electrical and Computer Engineering (ECE)

Durham, US

- GPA: 3.94/4.0
- Related Courses: System Programming, Software Engineering, Computer Security, Enterprise Storage Architecture, Database Systems

Purdue University (IUPUI)

Class of 2020

Bachelor of Science in Computer Science (CS), minor in Mathematics

Indianapolis, US

- GPA: 3.83/4.0; Science Honors with scholarships; Dean's List
- Teaching Assistant for several courses (e.g. Computation for Scientific Apps)

SKILLS

- **Programming Language:** Java, Python, C++, C, PostgreSQL, HTML, CSS, JavaScript, Verilog, MATLAB
- **Development Tools:** Git, Linux, Docker, Jira, Visual Studio, Flask, Springboot, Angular, GDB

PROFESSIONAL EXPERIENCE

Cisco System - Full time

2021/06 – 2022/08

Software Engineer & Scrum Master, Webex China Infrastructure

- Developed two **Python**-based Webex Chat Bots to streamline Agile workflows and provide release information, boosting team efficiency by 30% and served as the basis for efficiency tool development across multiple teams.
- Integral to Webex's transition to a hybrid cloud architecture by building **Kubernetes** clusters and deploying services using Terraform, Argo on major cloud platforms.
- Coached two Scrum teams adopting **Agile** principles, facilitated key Agile meetings, ensuring seamless alignment with other teams.

BorgWarner - Internship

2023/06 – 2023/08

Software Engineer

- Developed automotive software, creating Python scripts for automated CAPL script generation over CAN interfaces, significantly improving testing processes and functionality for key clients like Polestar and Volvo.
- Enhanced diagnosis modules within the AUTOSAR platform, employing MATLAB Simulink and C to ensure technical compliance and boost system efficiency, contributing to project deliverables and client satisfaction.

Los Angeles Capital Management and Equity Research - Internship

2019/09 – 2019/12

Software Engineer, Web Application

- Used **Angular8** and web services to advance an existing proprietary software system, introducing new pages and refining UI features. Achieved significant improvements in software usability and user experience, receiving positive feedback from users.
- Designed unit tests for existing components, achieve 90% test coverage, which enhanced code integrity and robustness.

PROJECTS

RAID Driver Development Using BUSE

Spring 2024

- Developed RAID 0, 1, 4 drivers utilizing BUSE, an open-source library enabling direct data writing to block devices from user space.
- Implemented core RAID functionalities including striping, mirroring, parity, and operating in degraded mode.
- Performed performance analysis with an IOPS benchmark tool to evaluate the sequential and random I/O efficiencies of the drivers.

Mini Amazon

Spring 2024

- Developed a full-stack, database-driven e-commerce website using **Flask** and **PostgreSQL**, winning the faculty-choice award.
- Designed the database schema, enabling products browsing, purchasing, reviewing, account settings and inventory management.
- Enhanced user experience by implementing robust search and filtering functionalities, including category browsing, keyword search, and sorting by price and rating.

RISK Game

Spring 2023

- Developed a multiplayer real-time strategy game RISK in **Java** and used **Spring Boot** framework to implement features like login, player matching and reconnect. Achieved 100% test coverage using Junit.
- Employed multithreading to optimize performance and enhance gameplay experience.
- Adhered to S.O.L.I.D principles, used a front-end/back-end separation architecture, and applied the Abstraction Factory Design Pattern. Finalized project design with UML diagrams and maintained updated documentation to ensure team productivity.

LEADERSHIP & SERVICE

Chinese Student & Scholar Association (CSSA) at Purdue University, Vice President & Founder

2018/08 – 2020/12

- Founded the organization with 5 board members, recruiting new members and securing sponsorships for 3+ events each semester.

Asian Student Union (ASU) at Purdue University, Webmaster

2017/05 – 2020/05

- Maintained the organization's official website, updating the organizational information and ongoing events.