Yiwen (Emelina) Wang

She/her/hers | Backend_Software Engineer | Student Leader | AnitaB & GHC Volunteer 24' | Greater Seattle Area (Ready to Relocate)

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SUMMARY

Dynamic and highly motivated **software engineer** with a strong foundation in developing innovative and efficient software solutions and **code optimization**. Proficient in effective communication, risk management, and **problem-solving**, teamwork and collaboration with **cross-functional teams**. Completed 10 projects, including one ready to launch for the campus use. Successfully led team projects that improved runtime and **code efficiency by approximately 60%** and reduced development time by 25% through applying **object-oriented principles**, **SDLC**, and optimizing **database management**. Committed to **backend development**, **full stack development**, and adhering to **Agile** and **SDLC methodologies**.

EDUCATION

Northeastern University, Seattle, WA

Jan 2023 - Dec 2025

Master of Science in Computer Science | GPA 4.0/4.0 | Exceptional Student Representative

- Awards: NEU 2024 Needle in a Hack-Stack Hackathon, Top 3 Team & Most Data-driven Solution Award
- Teaching Assistant: Object-Oriented Design course
- Core Technical Skills: Java, JavaScript, Python, C#, C, HTML, CSS, Spring, Django, React, Node, Express, Git, RESTful API, AWS, Azure, MySQL, MongoDB, Database system management, Data structure, Algorithms, software development life cycle (SDLC) methodologies, distributed systems, backend development, full stack development.

INTERNSHIP

Software Engineer Intern

Summer 2024

Uplift NW – Seattle, WA

• Developed data processing scripts and produced visualizations to provide actionable business insights; Collaborated with a cross-functional team to design and implement a scalable and efficient **full-stack web application** using **JavaScript**, contributing to both the architecture and framework. Led the design and development of an input data model, ensuring it met complex data requirements while remaining scalable and user-friendly.

Software Engineer Intern,

Summer 2023

Zhejiang Golden Webking Co., Ltd. – Remote

- Developed a loyalty program management system using **Java** and **Spring Boot**, enhanced customer engagement by 30%.
- Seamlessly integrated the system with the e-commerce platform, using **RESTful APIs** and **Hibernate**, to track customer purchases, allocate points, and facilitate reward redemption during checkout, optimizing the user satisfaction by 35%.

LEADERSHIP

Tech@Crossroads, Northeastern University – Seattle, WA

Fall 2023 - present

President, Founder and Software Engineer

• Founded and led this student organization with over 100 members, being most organized student organization in Seattle campus, hosting a LeetCode practice group, and the first & innovational student organization have its own student-led software development project team in both the Khoury college and Seattle campus.

PROJECTS

JavaScript Full-Stack Web Application with MongoDB

Spring 2024

- Initiated and led the team, developing a full-stack inclusive publishing platform for Northeastern University Seattle Campus students' usage, using JavaScript, with MongoDB as the database management.
- Improved and refactored the backend by boosting the runtime efficiency approximately 70% and optimizing code efficiency by 60% through applying the object-oriented principle.

JavaScript Full-Stack Web Application with MongoDB, <u>Demo</u>, <u>GitHub</u>

Spring 2024

- Developed a secure and user-friendly password management application using JavaScript for full-stack development. It was built with Express and Node.js, React, MongoDB used for database management, and deployed on Heroku.
- Improved the user experience and security by boosting the querying time approximately 80% and optimizing the security through implementing authentication with cookies, user authorization (share-request), encrypted sensitive data, and cryptographically secure password generation.

Backend Java Application with GUI, <u>Demo</u>, <u>GitHub</u>

Spring 2023

• Developed a **Gesture-based Musical Notation Editor** using **Java**, **MVC** design, and **Swing**, improved user experience by allowing intuitive gesture-based input for musical symbols. Engineered a **shape trainer** to recognize and interpret mouse gestures, enabling users to draw diverse symbols like bar lines with ease.