# Yiwen (Emelina) Wang

She/her/hers | 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

2023 - 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
- Certificate: Foundational C# with Microsoft; Advanced Python; Introductory AI Literacy
- **Teaching Assistant**: Object-Oriented Design course
- Technical Skills: Java, Python, C#, C, JavaScript, CSS, HTML, Spring, Django, React, Express.js, Git, Postman, RESTful API, Node.js, AWS, Azure, MySQL, MongoDB, Database system management, Data structure, Algorithms, software development life cycle (SDLC) methodologies, distributed systems.

#### INTERNSHIP

### Zhejiang Golden Webking Co., Ltd. - Remote

Summer 2023

Software Engineer Intern

- 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, <u>Demo</u>, <u>GitHub</u>

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 Python Web Application with full SDLC, Demo, GitHub

Fall 2023

- Developed an **online payment platform** using **Python**, **MySQL**, **RESTful APIs**, and **Django**. Leveraged **AWS** for deployment and **Docker** for containerization to ensure scalable and secure architecture.
- Improved the user experience and security by reduced development time by 25% through an industrial practice of software development life cycle (SDLC), incorporating features such as card validation, user authentication, account creation, balance calculation, and history tracking.

## 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, improving 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.