

Xi Yang

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 Website  LinkedIn  Github

EDUCATION

Northeastern University

Seattle, WA

MS in Computer Science Candidate, GPA: 4.0 / 4.0

Sep 2023 – May 2026 (expected)

Coursework: Cloud Computing, Database Management, Data Structures & Algorithms(C), OOD(Java)

Peking University

Beijing, China

BA in Arabic Language and Literature, GPA: 3.73 / 4.0

Sep 2015 – Jun 2019

TECHNICAL KNOWLEDGE

Programming Languages: Java, Python, C/C++, JavaScript, SQL

Frameworks & Tools: SpringBoot, React.js, Node.js, MongoDB, MySQL, Redis, Docker, Kubernetes, AWS

PROJECTS

Tickets App with Microservices | Node/Express.js, React, Docker and Kubernetes

- Architected and deployed a robust ticketing platform using microservices for seamless product management, order processing, payment handling, and user authentication with Node/Express.js, React, Docker, and Kubernetes.
- Implemented secure user authentication mechanisms, integrating **JWTs** with **session support** and **advanced AES encryption**; reduced unauthorized access incidents by 40% and enhanced overall data security compliance standards.
- Utilized a robust cloud deployment strategy by leveraging **Docker** for containerization and **Kubernetes** for orchestration; decreased server costs by 25% and improved application scalability.

E-Commerce Platform | Java, Redis, SpringBoot, RabbitMQ, MySQL

- Developed a comprehensive online shopping platform with features like SMS login, tracking website UV stats, coupon flash sale, and user check-ins.
- Implemented robust **distributed locking mechanisms**, preventing overselling during high-traffic periods and maintaining 99.9% inventory accuracy.
- Enhanced system throughput by over **300 times** by integrating a **Redis caching layer** to efficiently store and retrieve merchant and user data, significantly improving application performance and reducing load times;
- Boosted operational efficiency by overhauling order processing with **RabbitMQ**, doubling response rates and reducing turnaround time from 48 hours to 24 hours.
- Standardized error handling by customizing **unified error codes** and encapsulating a **global exception handler**; reduced debugging time by **40%**.

Brewtopia Coffee Lab Full Stack Web | MongoDB, Express.js, React.js, Node.js

- Developed a dynamic and responsive coffee shopping platform, offering a seamless shopping experience (including user authentication, cart update, checkout) for coffee enthusiasts.
- Implemented a unique feature of **dynamic color changes** based on product color using **Redux Toolkit**, enhancing visual appeal and user engagement.
- Designed and implemented robust **RESTful APIs** and utilized **API slice** for efficient data fetching and state management, reducing API call response times by **40%** and enhancing code maintainability.
- Optimized MongoDB queries by indexing key fields and using aggregation pipelines, resulting in a **60%** reduction in load times.

PROFESSIONAL & VOLUNTARY EXPERIENCES

Teaching Assistant CS3500 Object-Oriented Design | Northeastern University, Seattle

Jul 2024 - Sep 2024

- Assisting the instructor in preparation of course materials including assignments, labs, quizzes, and exams.
- Conducted thorough code reviews for 10 students, providing actionable feedback and clarifying complex concepts

Administrative & Event Assistant | Northeastern University, Seattle

Apr 2024 - Present

- Executed and streamlined multiple administrative and event tasks, successfully collaborating with 15+ team members, resulting in a 20% increase in guests satisfaction.

Website Master of The Pain Cognition and Modulation Lab | Shenzhen University, China

2022 - Present

CERTIFICATES

SQL certified by HackerRank

Professional Communication certified by Northeastern University