Lelin Zheng (She/Her)

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EDUCATION

Northeastern University

Sep 2024 - May 2027

M.S. in Computer Science, GPA: 4.0 / 4.0

Seattle, WA

Relevant Coursework:

Object-Oriented Design, Computer Systems, Algorithms, Database Management Systems, Cloud Computing

University of Alberta

B.Ed. in Education with Distinction, GPA: 3.8 / 4.0 **M.S.** in Materials Engineering, GPA: 4.0 / 4.0

Sep 2020 – May 2022

Sep 2017 – May 2019

Edmonton, AB

TECHNICAL KNOWLEDGE

- Languages: Python, Java, C, JavaScript, HTML/CSS, SQL
- Tools & Frameworks: Spring Boot 3, Spring Cloud (Gateway, Eureka, Config), Resilience4j, Hibernate (JPA), Angular 18, React, Node.js, Express.js, Sails.js, EJS, Bootstrap, Flask, Django, PyQt6, Java GUI (AWT & Swing), Kubernetes, Linux/Unix, Git
- Testing & Observability: JUnit, Jest, Supertest, WireMock, OpenTelemetry, Grafana Stack
- Databases & Services: MySQL, SQLite, MongoDB Atlas, AWS, Vercel, Render

RELEVANT WORK EXPERIENCE

Software Engineer Intern Jetsweat Inc.

May 2025 – Aug 2025

New York, NY

• Designed and implemented **RESTful APIs** with **Node.js**, **Express.js**, and **MySQL** to surface user-level analytics and a white-label admin toggle, delivering actionable data for 50+ corporate partners.

- Revamped the user onboarding modal using **React**, **Redux**, and **CSS** Modules to enhance UX clarity and flow, integrating new health-topic data sources for personalized video recommendations, resulting in a 25% increase in user engagement with platform content.
- Enhanced the admin dashboard using **JavaScript**, **EJS**, and **Bootstrap**, enabling real-time video engagement tracking, diagnosing and resolving 10+ production issues, and boosting internal support efficiency by 30%.

High School Computer Science Teacher

Sep 2022 – Jun 2024

Calgary Board of Education, Crescent Heights High School

Calgary, AB

- Taught Computer Science to 100+ students in grades 10 and 11, covering programming fundamentals, algorithms, procedural and functional programming, **OOP** in **Python**, and **HTML/CSS** for web development.
- Developed a **Python**-based scheduling application that efficiently organized a 10-team inter-school badminton tournament, reducing manual coordination time by over 80% and ensuring conflict-free match scheduling.

PROJECTS

NextGen-Online-Shop: Spring Boot 3 Microservices Online Shopping Platform

- Designed and implemented four Spring Boot 3 microservices (Product, Order, Inventory, Notification) behind a Spring Cloud Gateway, leveraging Eureka, Spring Cloud Config, and Resilience4j, containerized with Docker and deployed on Kubernetes, resulting in 99.9% service availability.
- Built observability and an event-driven architecture with **OpenTelemetry**, the **Grafana** stack (**Prometheus**, **Grafana**, **Loki**, **Tempo**), **Apache Kafka**, and **Keycloak**, validated via **Testcontainers** & **WireMock**—cutting mean time to resolution by 50%.

Qualcomm On-Device Al Hackathon: Al-Powered Narrative Connect Four (2nd Place Winner)

- Engineered a **PyQt6-based GUI** with multi-threaded event handling for a responsive and interactive **LLM-integrated** Connect Four game experience, featuring dynamic UI updates and real-time AI narration.
- Integrated **local LLM inference via Ollama (Mistral-7B)** with game logic algorithms (minimax with alpha-beta pruning), implemented speech-to-text **(Whisper ASR)** for Al-driven commentary for a seamless offline experience.

Task Master: Full-Stack To-Do List

- Developed a full-stack task management app using **React**, **Node.js**, **Express.js**, **MongoDB Atlas**, and **Bootstrap**, featuring **JWT authentication**, protected routes, and **RESTful APIs** for full CRUD functionality.
- Tested backend with **Jest** and **Supertest**; deployed frontend on **Vercel** and backend on **Render**, with environment configuration via **dotenv** for secure production readiness.