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   Sep 2020 – May 2022
M.S. in Materials Engineering, GPA: 4.0 / 4.0   Sep 2017 – May 2019
                                                                                                                                        Edmonton, AB

TECHNICAL KNOWLEDGE

- **Languages:** Python, Java, C, JavaScript, HTML/CSS, TypeScript, 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   May 2025 – Aug 2025
Jetsweat Inc.   New York, NY
- Designed and implemented 10+ **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 AI Hackathon: AI-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 AI-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.