Linxin Li

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Education

University of Toronto   **Sept 2024 – May 2026**
Master of Engineering with an Emphasis in Applied Machine Learning   *Toronto, Ontario, Canada*

University of British Columbia   **Sept 2021 – May 2024**
Bachelor of Applied Science in Computer Engineering   *Vancouver, British Columbia, Canada*

Relevant Coursework

- Machine Learning
- Large Language Models
- Software Engineering
- Data Structures
- Computer Algorithms
- Full-stack Development
- Database Systems
- Cloud Computing

Technical Skills

Languages: HTML/CSS, Java, C/C++, Golang, JavaScript, MySQL, Python, TypeScript
Developer Tools: DBeaver, Git, GitHub Actions, Jenkins, Jira, Lens, Postman, Microsoft 365 Suite
Technologies & Frameworks: Anaconda, AWS (Certified Solutions Architect), Docker, Kubernetes, Linux, MongoDB

Professional & Research Experience

SAP SE   **Apr 2025 – Sept 2025**
AI Application Engineer Intern   *Shanghai, China*

- Developed core features for Joule AI Assistant using python and GPT-5. Modernized CI/CD for Joule by architecting a modular GitHub Actions pipeline using Project Piper and Kyma; automated the deployment process via ArgoCD.
- Architected end-to-end testing for Joule and Codengine using Cucumber and Pytest; automated daily Jenkins reporting and maintained 90%+ integration and 95%+ unit test coverage per sprint.
- Engineered a Flask RESTful API to orchestrate 50+ IoT devices via OrionStar robots, automating showroom demonstrations for international visitors and replacing manual control with a synchronized system.

Urban Data Research Center   **Sept 2024 – Apr 2025**
Full Stack Developer   *Toronto, Canada*

- Architected an automated Divide, Conquer, Recheck (DCR) pipeline using Python and GPT4o to extract structured numerical data from scientific publications; achieved 88% accuracy across 1,464 data points.
- Developed an interactive React dashboard for the City Digital Twin Project , integrating GraphDB via SPARQL to visualize stratified urban data through map-based indicators and multi-dimensional charts to facilitate "complete community" analysis and data-driven urban planning.

University of British Columbia   **Sept 2023 – Apr 2024**
Research Assistant - Applied Machine Learning and Federated Learning   *Vancouver, Canada*

- Optimized deep learning architectures for the MedFM Medical Image Classification Challenge, achieving **80%** accuracy on multi-domain medical datasets through advanced data curation and fine-tuning of state-of-the-art models.
- Developed a Byzantine-robust Federated Learning aggregation strategy to mitigate poisoning attacks; implemented a dynamic weighting mechanism that identifies malicious clients by analyzing current and historical update trajectories.
- Evaluated Federated Learning vulnerabilities by engineering an adversarial attack framework; simulated sophisticated model poisoning that dynamically mimicked benign client behavior, successfully degrading global model accuracy by 5%.

SF Express   **Apr 2023 – Sept 2023**
Software Engineer   *Shenzhen, China*

- Architected an automated evaluation pipeline to trigger LLM inference on large-scale datasets and programmatically benchmark outputs against ground-truth labels, streamlining the model validation lifecycle
- Developed a multi-tier dashboard enabling regional managers to query delivery worker compliance; implemented a hierarchical data-fetching API and complex filtering logic to manage provincial and city-level data granularity.
- Architected an integrated automation suite using Selenium and Pytest to conduct end-to-end (E2E) testing across frontend and backend APIs; validated 300+ functional points and achieved 95% code coverage across unit and integration test suites to ensure system-wide stability.

Selected Projects

Immersio Immy Chatbot | *Python, MongoDB, JavaScript, Java, HTML & CSS*   **Sept 2023 - May 2024**

- Developed a full-stack voice-based AI chatbot using Flask and MongoDB, featuring a dynamic frontend in HTML/CSS that adjusts content based on real-time user course progress.
- Engineered backend logic for automated speech evaluation, implementing core modules for vocabulary level analysis, fluency classification, and grammatical assessment to track user proficiency.