

Siqi (Fermi) Fei

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Education

University of Toronto

Honours Bachelor of Science (H.BSc) in Computer Science and Statistics

Expected Graduation: 2026

- Awards: University of Toronto Scholarship (2020-21 Fall/Winter Session)

Experience

IBM Canada WatsonX Bob Core

August 2025 – Current

AI Model Engineering & Full-Stack Developer

- Built full-stack dashboards with React, TypeScript, and Node.js, improving AI model evaluation efficiency by 40%.
- Fine-tuned and evaluated **100+ large language models (LLMs)** across multiple enterprise domains.
- Designed interactive UIs to visualize **50K+ model metrics**, enabling faster and more accurate performance comparisons.
- Developed secure, scalable backend services following IBM's Carbon Design System and internal compliance standards.
- Utilized LLM-assisted tools to accelerate development cycles by **25%** and enhance testing coverage.
- Coordinated product strategy and feature roadmap for AI model evaluation platforms, aligning technical goals with user needs.

IBM Canada WatsonX Code Assistant

May 2025 – September 2025

Product Manager

- Defined product vision and roadmap for internal AI model evaluation and fine-tuning platforms.
- Facilitated sprint planning and cross-functional communication, improving delivery speed by **20%**.
- Collaborated with AI researchers, engineers, and design teams to align development priorities with user needs.
- Collected and analyzed feedback from **50+ enterprise users** to guide feature design and usability improvements.

University of Toronto

January 2025 – April 2026

Teaching Assistant, CSC309 Programming on Web, CSCC01 Software Engineering

- Conducted tutorials and supported students in understanding course material.
- Collaborated with colleagues to ensure alignment with course objectives.
- Facilitated student engagement through interactive communication platforms.
- Evaluated student work and contributed to fair assessment practices.

MintC. Proverbs Auction

May 2024 – September 2024

Full-Stack Web Developer

- Built responsive front-end components with React and JavaScript.
- Developed back-end APIs using Django and integrated PostgreSQL/MySQL databases.
- Streamlined data queries with GraphQL and secured data with RSA and AES encryption.
- Conducted automated QA testing, reducing downtime by 30%.

Projects

University of Toronto Ramsey Lab DL Algorithm

November 2025 – Current

- Click to visit Lab official website
- Trained CNN models (VGG19, ResNet) for phytolith image classification in archaeological research.
- Developed reproducible computer vision pipelines using Python and PyTorch on GPU servers.
- Applied visualization and error analysis techniques (e.g., Grad-CAM) to interpret model behavior.

Machine Learning Model Development

January 2024 – Current

- Led the creation and refinement of machine learning algorithms for advanced predictive modeling.
- Directed a team to integrate AI techniques, achieving practical and impactful results.
- Ensured accuracy and reliability of models through comprehensive validation processes.

Skills

Programming JavaScript, TypeScript, Python, Git, Linux, SQL, HTML, CSS, C, C++, JAVA, React, Vue, Django, PostgreSQL, R, SAS, MATLAB, Go, Selenium, AES, RSA, base64

Technical Microsoft Office 365, Photoshop, Adobe Creative Suite, Video Filming and Editing

Professional Leadership, Team Collaboration, Problem Solver, Data Gathering, Technical Writing, Critical Thinking, Active Learning, Adaptability, Creativity, Interpersonal Relationships

Languages English, Chinese