

# Rain Zhang

rainzhang.zty@gmail.com | +1 (236) 333-7191 | Vancouver, BC, Canada | [Portfolio](#) | [GitHub](#) | [LinkedIn](#)

## Experience

**Full Stack Engineer Intern - International Department**  
*FEITIAN Technologies Co., Ltd.*

**September 2025 – December 2025**  
*Beijing, China*

- Built three full-stack platforms end-to-end, covering frontend, backend, authentication logic, testing, CI/CD, and deployment, supporting security product development and testing.
- Created the company's first developer tools system, replacing scattered third-party tools and centralizing WebAuthn/FIDO2 testing for engineers.
- Enabled early post-quantum authenticator development by integrating ML-DSA algorithms into testing platforms and virtual authenticators before production hardware was available.
- Worked cross-border with US-based stakeholders, delivering production features supporting international users.

## PROJECTS

**Authentication & Security Demo Platform | [Website](#)**

**November 2025 – December 2025**

- Built a user-facing full-stack platform demonstrating modern authentication and security workflows, providing a centralized experience where none previously existed.
- Demonstrated real usage flows for software and hardware authenticators, biometrics, and OTP (One-Time Password) login.
- Improved user understanding of products and supported sales demos and customer experience.

**Tech Stack:** Python, React.js, TypeScript, Tailwind CSS, C/C++ (liboqs), Docker

**Software FIDO2 Authenticator | [Repository](#)**

**October 2025 – November 2025**

- Built a software-based FIDO2 authenticator to simulate hardware behavior for development and testing, accelerating early-stage validation of authentication flows and cryptographic behavior.
- Integrated ML-DSA post-quantum signatures, enabling Post-Quantum Cryptography (PQC) testing before hardware availability.
- Implemented with Linux virtual HID interfaces, providing a virtual testing environment focused on the correctness and robustness of assertions.

**Tech Stack:** Rust, C/C++ (liboqs), Linux

**Web Authentication Developer Platform | [Website](#) | [Repository](#)**

**September 2025 – October 2025**

- Designed and built FEITIAN's first WebAuthn/FIDO2 developer platform and consolidated multiple external tools into one system, improving developer convenience and testing efficiency.
- Implemented backend services for cryptographic verification and metadata processing, paired with frontend visualization tools, enabling efficient debugging and analysis.
- Integrated support for ML-DSA algorithms, contributing directly to FEITIAN's Post-Quantum Cryptography (PQC) development roadmap.

**Tech Stack:** Python (Flask), JavaScript, HTML, CSS, C/C++ (liboqs), Docker

## SKILLS

- Programming Languages / Frameworks:** Python, C, C++, Java, HTML, CSS, JavaScript / TypeScript, React.js, Rust
- Operating Systems:** Windows, MacOS, Linux
- Software & Tools:** Visual Studio Code, JetBrains IDEs, Google Cloud, Git, GitHub, Docker
- Security & Authentication:** FIDO2, CTAP2, Web Authentication, Post-Quantum Cryptography (PQC)

## EDUCATION

**Simon Fraser University**  
*Bachelor of Science in Computer Science*

**September 2023 – Present**  
*Vancouver, BC*

- GPA: 3.42 (83%)
- Dean's Honor Roll (Fall 2024) | Faculty of Applied Science
- Dean's Honor Roll (Summer 2025) | Faculty of Applied Science