

Feifan He

[Willing to Relocate]

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EDUCATION

- **Master of Science in Computer Science (GPA: 3.86)** - Brandeis University (*Aug 2022 - Dec 2024*)
- **Bachelor of Commerce (Graduated with Distinction)** - University of Toronto

WORK EXPERIENCE

Amazon - Software Engineer Intern (*May 2024 - Aug 2024*) *Seattle, WA*

- Contributed to the development of Amazon's Mobile Device Management solution using **Kotlin** for iOS, MacOS, Android, and FireOS devices, focusing on secure, automated certificate provisioning using the ACME protocol.
- Designed and implemented the ACME protocol infrastructure with **Typescript**, including a new service for authorized client requests, APIs for digital certificate installation on Apple devices, and an automated deployment pipeline for seamless integration and scalability.
- Evaluated and selected Native AWS compute services, ensuring scalable infrastructure and robust multi-tenancy support to address the noisy-neighbor problem, while integrating appropriate authentication mechanisms for secure device communication.
- Defined and implemented metrics and dashboards to operationalize the ACME service, providing real-time monitoring and insights, and demonstrated the end-to-end provisioning flow on Apple devices to verify successful ACME protocol and certificate issuance.
- Achieved stretch goals by enabling device attestation for enhanced security, integrating Federated device flow for user authentication, and automating certificate renewal and domain validations, reducing manual intervention.

Associated Environmental Systems - Software Engineer Intern (*Jun 2023 - Aug 2023*) *Acton, MA*

- Developed content management system to enable versioning, PDF exporting, and the read-only publication of reports, resulting in a 50% improvement in the lab report process and facilitating efficient collaboration.
(Backend: **Node.js**, **Express.js**, **InfluxDB**, and **MongoDB**. Frontend: **Next.js**, **React.js**, and **Tailwind CSS**.)
- Implemented data cleaning, parsing, and reduction techniques, achieving a 35% reduction in storage.
- Leveraged a data reduction technique that remediates the app from frequently crashing due to loading too many data points, and improves the chart rendering speed by 40%.
- Created automated tests to enhance reliability and worked closely with product managers to ensure that the delivered features aligned with user requirements within the agile development cycle.
- Designed and implemented the CI/CD pipeline to automate the build and test process.

SKILLS

- **Languages:** Python | Java | JavaScript | TypeScript | CSS | HTML | Kotlin | Bash | Node.js | SQL
- **Frameworks:** Angular | React | Next.js | jQuery | Django | Flask | Spring Boot | Socket.io | Bootstrap
- **Cloud/Tools:** GCP | AWS | Git | Docker | Kubernetes | Jenkins | Bitbucket | Jira | Postman | Mocha | Chai