GRACE GAO

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EDUCATION

University of Waterloo | **Bachelor of Software Engineering; Combinatorics Minor**   2020 – 2025
cGPA: 3.9/4.0; Alumni at Microsoft Scholarship, Grace Hopper Scholar, President Scholarship of Distinction
Study abroad semester @ Charles III University of Madrid

EXPERIENCE

Figma | **Software Engineering Intern**   San Francisco, CA ■ 05/2024 – 09/2024
- Designed, implemented and shipped a company-wide security system to scan **1.5k+ laptops** for sensitive data (**Go, AWS, SQL, Osquery, Trufflehog**); uncovered **700+ secrets** and reduced local **data security risk by 55%** by alerting users through **Slackbot (Python, Panther)** and **defining new guidelines** for best practices
- Built a self-serve process **(Terraform, Bash)** for engineers to create **service accounts (Opal, Okta, Google Groups)** and request **just-in-time access** without manual IT setup; designed a secure **passwordless** authentication flow for seamless multi-user experience, adopted by **10+ accounts**

Datadog | **Software Engineering Intern**   New York, NY ■ 01/2024 – 04/2024
- Architected and launched an **ETL data pipeline** to identify and report billing discrepancies of up to **300k+ dollars**/month, ingested from **30+ historical datasets** using **Scala, Python, Spark, Jupyter, Luigi, AWS**
- Implemented efficient **Spark jobs** to calculate projected revenue impact from billing changes, resulting in a **30x reduction** from previous pipeline execution time; presented **Metabase** reports and visualizations to PMs

Bloomberg | **Software Engineering Intern**   New York, NY ■ 05/2023 – 08/2023
- Drove research, design and implementation of a **Kafka Connect** source connector **(Kotlin)**, a fault-tolerant application enabling distributed streaming of **5k+ messages/second** from **RabbitMQ** to **Apache Kafka**
- Built, tested and **deployed to production** the end-to-end integration consisting of internal **service endpoints** **(C++)**, a **web interface (Angular.js)** and the **Bloomberg Terminal (TypeScript);** presented to **2k+ engineers**

Faire | **Software Engineering Intern**   Toronto, ON ■ 09/2022 – 12/2022
- Led the design and end-to-end implementation of a **user-facing security portal** featuring session management and event logs (**Kotlin, Hibernate, TypeScript, React.js**, Figma); coordinated with engineering, product, design, and legal teams to ensure the successful **launch to 600k+ users**
- Performed data-driven investigations using **Snowflake, Datadog, AWS, Mode** to resolve **30+ security issues**

Faire | **Software Engineering Intern**   Waterloo, ON ■ 01/2022 – 04/2022
- Built and shipped **15+ core components** for the product launches of *Insider* and *Open with Faire* using **React.js**, **TypeScript**, **Jest**, **Cypress**; used by **10k+ European retailers**
- Initiated an optimized **auto-rebase Github workflow** in the **largest frontend repository**; used **50+ times/week**

Hack the North | **Hackathon Organizer**   Waterloo, ON ■ 03/2021 – 10/2022
- Design (2021): Created the visual brand for the **world's biggest collegiate hackathon** with **3k+ participants**
- Logistics (2022): Executed a 6-month roadmap to lead **150 in-person mentors** for **1k+ participants**

SKILLS

Languages | Go, Kotlin, Scala, Python, TypeScript, C++, Java, SQL   **Spoken** | English, French, Mandarin
Tools & Technologies | Git, Terraform, Spark, AWS, Kafka, Jupyter, Docker, React.js, RabbitMQ, Node.js, Figma