

# Damian Reiter

Software Engineering Student

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## SKILLS

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**Languages:** C, C++, TypeScript, JavaScript, Go, Python, SQL, Ruby, Java

**Technologies:** Git, Docker, gRPC, Node.js, Make, Rails, Kafka

## EXPERIENCE

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### Citadel

Software Engineer, *Electronic Trading Engineering*

New York City, NY

Aug 2023 - Present

- Currently building a new real-time trade reconciliation platform responsible for ensuring every trade flows through the front, middle, and back-office systems

### Snowflake

Software Engineer Intern, *Database Query Engine*

San Mateo, CA

Sept 2022 - Dec 2022

- Designed and implemented major optimizations to Snowflake's query engine, improving performance of **AND** expression evaluation by at least 2x on columns with  $> 0.1\%$  null-skew, impacting millions of queries daily
- Identified additional optimization opportunities in Snowflake's query engine and wrote technical design documents detailing proposed implementation options

### BitGo

Software Engineer Intern, *Blockchain Engineering*

Palo Alto, CA

Jan 2022 - Apr 2022

- Developed support for the Lightning Network protocol, allowing BitGo customers to make Bitcoin transactions with  $> 99\%$  reduced fees and processing time
- Maintained and developed Bitcoin-related improvements to BitGo's core wallet platform which processes over 20% of all Bitcoin transactions by value

### Splunk

Software Engineer Intern, *Advanced Security Analytics*

San Jose, CA

May 2021 - Aug 2021

- Performed research on modern data stream normalization techniques and delivered multiple presentations to greater team
- Applied findings from research to design and develop new risk score normalization system, improving performance of key services and increasing product usability

### Shopify

Data Science Intern, *International Data Science*

Toronto, ON

Sept 2020 - Dec 2020

- Analyzed data to detect fraudulent usage patterns of Shopify, increasing accuracy of company-wide data analysis and improving product integrity

### Shopify

Data Science Intern, *Plus Data Science*

Waterloo, ON

Jan 2020 - Apr 2020

- Reduced complexity and improved ease of access to Shopify Plus billing and contract data by designing and developing a large-scale dimensional data model responsible for processing over 100M rows per day

## PROJECTS

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### Beam

TypeScript + Go

- Created a cross-platform, end-to-end encrypted, natively integrated file transfer application
- Designed cryptosystem to support zero-knowledge encryption and allow trustless server operation
- Implemented common Go library to maximize code reuse across desktop and mobile clients

## EDUCATION

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### University of Waterloo

B.SE in Honours Software Engineering, 4x Dean's Honours List, GPA: 90/100

Waterloo, ON

Sept 2018 - Apr 2023