# **Dylan Snelgrove**

## Education

### University of Waterloo | Bachelor of Software Engineering

• With Distinction — Dean's Honours

# Work Experience

#### GTS | C++ Developer

- Developed and deployed software to check if the firm's trades (100+ GB / day) complied with financial regulations.
- Improved type safety of C++ codebase by rebuilding library to use C++20 concepts.

#### Splunk | Back-end Software Engineer

- Evaluated four test result storage solutions by creating prototypes to compare performance, ease of use, and cost.
- Improved SQL guery performance 90x by using materialized views to precompute summary statistics.
- Migrated test reporting service to serverless architecture reducing complexity, decreasing latency, and improving availability. Used Terraform, AWS Lambda@Edge, and CloudFront.

#### AMD | DevOps Engineer

- Developed highly reliable, scalable search solution using Filebeat, Logstash, and Elastic Search.
- Built GitHub Apps used by 100+ teams to improve code quality by utilizing automation. (Typescript, Probot)
- Verified software quality with unit tests (Jest), achieving 90% coverage, and with manually-conducted system tests.

#### SAP | Cloud Data Movement Software Developer

- Delivered lower cost, better performing database solution which allowed customers to better utilize their cloud resources by developing a reliable, scalable, Kubernetes-orchestrated Go microservice to automate data tiering.
- Designed simulation feature to "dry-run" moving data between tiers, creating detailed specifications and design document by collaborating with system architects, UI designers, and customer stakeholders.
- Implemented simulation feature to be performant and defect-free by utilizing concurrency and unit testing.

#### Baron Biosystems | Front End Developer

- Refreshed collaborative cycling feature, culminating in 65-person real-time race by improving mobile-friendliness and • integrating real-time video, leaderboards, and performance gauges. (Javascript, PHP, Laravel)
- Increased frame rate by 5x by profiling using DevTools then re-engineering to optimize performance bottlenecks.

#### Avante IO | Software Developer

Developed intelligent package location prediction by utilizing patterns in the package location paths of 7 major shipping companies and exposed this via a REST API created in Django.

# Projects

#### WinTrafficData 🔗

- Synthesized signal timing improvements from over 40 000 rows of traffic data from Windsor's intersections.
- Selected from 74 submissions to win the \$1000 "City of Windsor Data Challenge Award."

# Technical Skills

Skills Languages Technologies

Distributed Computing, Cloud Infrastructure, Algorithms, Data Structures, Relational Databases Python, C++, Typescript, Go, SQL, PHP, Java AWS, Pytest, Elastic, Kubernetes, Django, Laravel, Svelte, Git, Jenkins, Jira

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September 2019–April 2024

**Ø** dylansnelgrove.com

September-Decemember 2023

#### May–August 2022

September–December 2021

January–April 2021

January–April 2023

May–August 2020

March 2020