# Anees Aissaoui

✉ anees.aissaoui@uwaterloo.ca · 🔗 in/anees-aissaoui · ⌨ aaiss1 · 🌐 aaiss1.github.io

## Technical Skills

- **Languages:** Python, Java, C, C++, JavaScript, Kotlin, HTML/CSS, Bash, MATLAB, TCL
- **Skills:** UNIX, Git, SVN, AWS, GCP, Firebase, Pandas, PostgreSQL, MySQL, SQLAlchemy, SQLite, Alembic, Docker, Flask, Gradle, Jooq, Jackson, Spring, Pytest, Selenium, Node.js, Airflow, React

## Education

**University of Waterloo**                                                                 Sept 2019 - April 2024
Bachelor of Applied Science in Honours Computer Engineering, Co-op                            GPA 3.9
With Distinction - Dean's Honours List

## Relevant Experience

**Affirm**                                                                                      **Ottawa, ON**
*Software Engineer | Loan Origination & Reporting*                                        June 2024 - Present

**GTS**                                                                                       **New York, NY**
*Software Engineering Intern | Trading Analytics*                                          Sept 2023 - Dec 2023

- Enhanced data recon accuracy by 70% with a Python feature that maps trade data to ETF symbols using pandas, and standardizes formats across clearing firms for reliable data pipeline integration
- Processed and reconciled 500GB+ daily data by implementing a new data pipeline for a key firm
- Developed a data migration tool using mysqldump and Python, slashing data cloning times by 12x in 3000+ tables and enabling developers to selectively copy production data into local environments

**Palantir Technologies**                                                                    **Palo Alto, CA**
*Software Engineering Intern | Deployability*                                              Jan 2023 - Apr 2023

- Increased speed of Gotham Job API by 10x by identifying and optimizing performance bottlenecks
- Developed a feature allowing job configuration overrides to preset and customize Gotham job runs using Java and Jackson, saving customers 35% of their time for job setup
- Replaced the backend of a job monitor app using Java, Jooq, and PostgreSQL, resulting in 4x speedup

**DRW Trading Group**                                                                        **Montreal, QC**
*Software Engineering Intern | Web Insights*                                               May 2022 - Aug 2022

- Designed and built the RESTful backend of a Python app with Flask, PostgreSQL, SQLAlchemy, and Docker to analyze trade event data, saving traders and data analysts 18% of their planning time
- Reduced a core system's network fail rate by 20%, enhancing low-latency trading pipeline reliability
- Enabled 120+ traders to react to sudden market changes 10+ minutes faster by writing a bot that pulls and posts essential data from an internal trading desk

**NFTY Labs**                                                                             **San Francisco, CA**
*Software Engineering Intern | Core Engineering*                                           Oct 2021 - Dec 2021

- Led development of a serverless app to auto-complete cryptocurrency invoices using Python, Freshbooks API, AWS Lambda, and CloudWatch, reducing accounting workload by over 80%

**Dell Technologies**                                                                           **Ottawa, ON**
*Software Engineering Intern | 5G R&D*                                                      Sept 2021 - Dec 2021

- Accelerated product rollout by 5 days by implementing secure versions of banned C functions, eliminating 2000+ security vulnerabilities in the codebase
- Increased device connection rate by 45% using scalable load-balancing on 5G cell network traffic

**Solace**                                                                                      **Ottawa, ON**
*Software Engineering Intern | Infrastructure*                                             Jan 2021 - Apr 2021

- Reduced runtime of health-checks by over 3x using parallelization to let scripts run concurrently in forks, resulting in much faster deployment and improvements to the developer workflow

**Nokia**                                                                                       **Ottawa, ON**
*Software Test Engineering Intern | Internet and Optical Networks*                         May 2020 - Aug 2020

- Designed a custom web traversal algorithm in Node.js to replace an outdated automation testing API using Node.js and Selenium, automating testing for over 30% of a customer-facing web app

## Projects

**StreetSmart** *Python, C++, RF24*                                                          ⌨ StreetSmart

- Developed a bicycle safety device featuring blind spot detection, brake lights, and turn signals