# **Grant Achuzia**

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gachuzia.com

## **EDUCATION**

**Carleton University** Expected May 2026

Bachelor of Engineering in Computer Systems Engineering

Ottawa, Ontario

**EXPERIENCE** 

Jan 2025 – Aug 2025 Lumentum

System Software Solution Test Intern | Design Verification and Test Intern

Ottawa, Ontario

Maintenance Drone Co.

May 2024 – Dec 2024

Software Developer Intern

Ottawa, Ontario

- Earned TransportCanada Small RPAS Advanced Operations Certificate and piloted drones to capture high-resolution roof-survey imagery and telemetry for training datasets.
- Engineered a Python flight-planning suite with Shapely and Matplotlib to parse KML/XML geospatial data into optimized drone waypoints, cutting manual setup times.
- Implemented a NumPy-based grid downsampling and noise-filtering algorithm, sanitizing point-clouds while preserving critical geometry for Blender-based Al annotation.

### Roof Maintenance Solutions

May 2022 – Dec 2023

Software Developer Intern

Ottawa, Ontario

- Created a Python class to streamline annotation data imports/exports in a custom report generator.
- Implemented regex-powered validation routines to detect and auto-correct XML survey annotation errors, boosting report reliability.

## **PROJECTS**

### Kortleck

Your Favorite Card Games All In One Place | JavaScript

### Twit

Simple Version Control System | C++

#### TRPL-M

Practice Mental Math In The Terminal/Browser | Python

## **ACTIVITIES**

## Canadian Engineering Competition (National Programming Category)

Mar 2024

**Bronze Medalists** 

Calgary, Alberta

- Optimized routing on a CSV-driven 100×100 grid using an A\* Python algorithm with environmental-cost heuristics.
- Developed a responsive web UI in HTML, CSS and JavaScript for visualizing extraction paths.

## **TECHNICAL SKILLS**

Languages: Python, JavaScript, TypeScript, C, C++, SQL, Bash, PowerShell

Technologies: Git, Jira, React, Docker, Flask, Figma, Linux, LaTeX, GitHub Actions

Concepts: Data Structures and Algorithms, CI/CD, Computer Architecture, Computer Networking, Agile, Scrum