Grant Achuzia

grant.achuzia@gmail.com | gachuzia.com | linkedin.com/in/grant-achuzia-8259251b8/

EDUCATION

Carleton University — *September 2021 – May 2026*
Bachelor of Engineering in Computer Systems Engineering — Ottawa, ON

PROFESSIONAL EXPERIENCE

Lumentum — *January 2025 – August 2025*
System Software Solution Test Intern | Design Verification & Test — *Ottawa, ON*
- Built end-to-end TypeScript test automation and CI/CD pipelines to cut manual regression cycles from hours to under 30 minutes per release via GitHub Actions + Selenium/Tauri E2E flows.
- Wrote Bash and SSH/gNOI/gNOIC scripts to automate firmware upgrades & connectivity checks across networked devices, reducing routine engineer intervention.
- Developed a modular Python CLI reporting tool to auto-generate PDF & PPTX test reports and surface failures, improving debugging turnaround and report consistency.

Maintenance Drone Co. — *May 2024 – December 2024*
Software Developer Intern — *Ottawa, ON*
- Engineered a Python flight-planning toolkit (Shapely, Matplotlib) to convert KML/XML geospatial data into optimized waypoint paths, streamlining mission setup.
- Implemented NumPy-based grid downsampling & noise filtering to accelrate point-cloud processing while preserving structural fidelity for downstream annotation in Blender.

Roof Maintenance Solutions — *May 2022 – December 2023*
Software Developer Intern — *Ottawa, ON*
- Created a Python utilities for annotation data imports/exports, improving report prep speed and data quality.
- Authored regex-powered XML validation to detect & auto-correct survey annotation errors, boosting report accuracy and reducing costly re-inspections.

PROJECTS

CU-Bytes
Ongoing Engineering Capstone | Flask, React Native/Expo, PyTorch, Azure, SQLite
- AI food-tracking app for Carleton University; identifies campus foods, estimates calories/allergens, shows user stats.
- React Native mobile (scan/manual entry, login), Flask API (auth, profiles, browse/scan), PyTorch model (classification/inference), SQLite for basic RBAC and cloud deployment in Azure.

Cell Reminders
Google Sheets Add-on/Script | Apps Script, JavaScript, HTML/CSS, Google Calendar/Sheets APIs
- Google Sheets add-on to create/view/manage calendar events directly from sheet cells, supporting one-time and recurring reminders.
- Live sidebar with reactive selection/validation, and scheduling options.

Fire Alarm Notification System (FANS)
Engineering Project | Python, Flask, JavaScript, Firebase, Raspberry Pi
- Real-time web UI for alarm monitoring and configuration with sub-second updates under local test conditions.
- Integrated Raspberry Pi Pico (MicroPython) with LEDs/buzzer and Firebase for event sync with an emphasis on reliability and clear operator feedback.

ACTIVITIES

Licensed Drone Pilot — Transport Canada Small RPAS Advanced Operations certified (PC2214005330).

2024 Canadian Engineering Competition — National Programming Category (Bronze Medalist) in Calgary, AB.

TECHNICAL SKILLS

Languages: Python, C, C++, JavaScript, TypeScript, Java, SQL, Bash, PowerShell
Frameworks & Tools: Git, Jira, Flask, React, Docker, GitHub Actions, Apps Script, Firebase, Linux
Concepts: Data Structures & Algorithms, Concurrency, Systems/Networking, CI/CD, DevOps, Agile/Scrum, Test Automation