JULIEN CHAGNON

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SUMMARY

Bilingual (English-French) third year Computer Engineering student seeking a 12-16 month co-op placement to further develop industry skills and exposure. Proficient in C/C++, Python, Java, HTML/CSS/JS, and Assembly with hands-on experience in VHDL, Arduino as well as web development. Experienced in data management, GIS analysis, and CAD modeling. Adept at problem-solving, debugging, and project collaboration, with a strong foundation in computer architecture and software development.

EDUCATION

Bachelor of Applied Science in Computer Engineering - Queen's University (2023-Present)

Cumulative GPA - 3.57

• Dean's Scholar (2024/25 Academic Year) – Stephen J.R. Smith Faculty of Engineering and Applied Science, awarded for outstanding performance.

WORK EXPERIENCE

Traffic Services Intern

City of Ottawa – May to August 2025

- Applied data analysis to collect and interpret pedestrian and vehicle survey data to improve roadway safety.
- Automated form collection workflows using Microsoft Power Automate.
- Used GIS tools to help map and analyze roadway data for traffic investigations.

Graffiti Management Assistant

City of Ottawa - May to August 2024

- Maintained a comprehensive database tracking service requests for city-wide graffiti removal efforts.
- Performed graffiti removal with industrial equipment while adhering to strict safety procedures for handling corrosive chemicals and maintaining equipment.

Camp Counsellor

Mountain Bike Kids – June to August 2022

- Supervised campers aged 8 to 14 while planning and leading mountain bike outings and day trips.
- Provided customer service with parents regarding individual needs, concerns, or complaints.

PROJECTS

Dynamic Time-Allocating Calendar (C++, Qt)

- Implemented a weighted time-allocation algorithm that redistributes study blocks as priorities and deadlines change.
- Parsed Queen's SOLUS .ics files to merge with user tasks and fixed events to build a weekly study schedule.
- Applied Agile and Scrum methodology to organize development cycles, managing merge requests and version control through Git for team collaboration and milestone tracking.

Running and Jumping Detection using machine learning (Python, scikit-learn)

- Trained logistic regression model (>95% accuracy), packaged with joblib, and built Tkinter desktop interface with real-time matplotlib visualization
- Developed end-to-end pipeline for CSV ingestion, hierarchical HDF5 storage, preprocessing, and extraction of 40+ features per 5-second window.

COMPETENCIES, SKILLS, AND ABILITIES

Programming experience: C/C++, Python, Java, Assembly (Nios II), JavaScript, VHDL, Qt framework

Libraries and Frameworks: Qt, Matplotlib, Pandas, Scikit-learn, Seaborn, h5py

Web Development: HTML, CSS Operating Systems: Windows, Linux

Data Management & Visualization: SQL, Matplotlib, Seaborn.

Software and Tools: Microsoft Office, Git (Github, Gitlab), GIS tools (QGIS), and SolidWorks CAD

CERTIFICATIONS

- Ontario G Class Driver's License (Clean Record)
- Standard First Aid/CPR-C and Automated External Defibrillator Certification (2024)