Nigel Groen

647-450-1909 | nigel.groen5@gmail.com | linkedin.com/in/nigel-groen-921797326/ | www.nigelgroen.me

Education

Queen's University Kingston, ON
Bachelors (Honours) in Computer Science, Certificate in Commerce, CGPA: 3.80 *Expected 2028*

Experience

Software Engineer Intern Summer 2025
Tracker Networks *Toronto, ON*

- Engineered full-stack features for Ventrack, a third-party risk management platform that enables users to create, assess, and track risks and mitigations.
- Built a tool to auto-generate company risk profiles by processing external data, streamlining a previously manual process and improving proactive risk identification.
- Implemented a real-time news feed API to display relevant articles for each risk, providing users with critical context for monitoring and decision-making.
- Structured and formatted data for the company's AI customer service agent, resulting in a 30% higher ticket resolution score.

Lead Developer Aug. 2025 – Present
Queen's COMPSA *Kingston, ON*

- Lead a team of 8 developers in building full-stack applications for a student body of 1,800+, managing project requirements, timelines, and code reviews.
- Architected and engineered a room booking system using Next.js, React, and Supabase, integrating AWS SES for notifications and deploying to production.
- Mentored team developers through technical challenges and PR reviews, fostering a collaborative and efficient team environment.

Project Engineer (Software Development) Sept 2024 – Present
Queen's Themed Entertainment Development Team *Kingston, ON*

- Engineered the Python-based ride control simulator for our team's submission to a themed entertainment design competition, modeling roller coaster movement, emergency stops, and maintenance protocols.
- Finished 1st overall in the TMU Thrill Design open round, outperforming 32 competing North American schools to secure a top seed in the Universal Creative invitational round.
- Developed show control programming for in-house projects, translating engineering requirements into functional software to validate design concepts.

Projects

NFL QB Fantasy Point Predictor | *Python, Scikit-learn, Pandas, XgBoost, Flask* July 2025 – August 2025

- Developed an XGBoost machine learning model in Python to predict NFL quarterback fantasy points in 2025, utilizing historical performance and defensive statistics.
- Achieved a Mean Absolute Error (MAE) of 3.99 when testing the model's predictions against the entire 2024 NFL season, demonstrating high predictive accuracy.
- Built an interactive JavaScript frontend to visualize predictions and provide a user-friendly interface for fantasy football analysis.

QWEB Calendar Booking App | *React, Javascript, Firebase, Tailwind, Node.js* January 2025 – April 2025

- Collaborated on a 4-person team to build a full-stack scheduling app for Queen's Web Development Club using React, Firebase, and Tailwind CSS.
- Delivered a functional product that hybridized Calendly & LettuceMeet, streamlining the club's event planning process by a tight sprint deadline.

Technical Skills

Languages: Python, C, JavaScript, TypeScript, HTML/CSS
Frameworks: React, Node.js, Next.js, Tailwind CSS, Express.js, Flask
Developer Tools: Git, Linux, VS Code, AWS, Supabase, Convex, Firebase, Clerk
Libraries: Pandas, NumPy, Scikit-learn, Radix, PyQt5