

Tristan Guevarra

tristan.guevarra@queensu.ca | (647)-783-7424 | linkedin.com/in/tristanguuevarra | tristanguuevarra.com

Technical Skills

Languages: Python, Java, SQL, C, C++, JavaScript, TypeScript, HTML, CSS, PHP, Assembly, LaTeX

Technologies & Tools: React, Node.js, MySQL, Vite, Vue, Django, MongoDB, Express.js, Git/GitHub, XAMPP, Qt, Entra, Azure, PowerBI, JetBrains, VS Code, Eclipse, Android Studio, Figma, PowerShell, UNIX

Education

Queen's University, BAsc in Computer Engineering Sept 2022 - Apr 2026

- **Coursework:** Object Oriented Prog., Data Structures, Algorithms, Database Management Systems, Data Science
- **Awards/Organizations:** Q3C, QWeb, Queen's Engineering Society, Excellence Scholarship Award

Experience

Software Developer Intern, Metergy Solutions Summer 2025

- Scheduled to complete a 12-week Software Developer internship at Metergy Solutions

Software Developer, ThisIsElectric Present

- Developing responsive website using **MongoDB**, **Express.js**, **React** and **Node.js**, enhancing online presence.
- Creating reusable React components, enhancing maintainability and reducing development overhead for future updates by 50%.
- Implementing **Tailwind CSS** for dynamic, reusable components, reducing front-end development time by 40%.
- Integrating **Power BI** with **MongoDB**, creating analytics dashboards that visualize customer inquiries, service conversions, and response times, enabling data-driven decisions and optimizing operations by 30%.

Undergraduate Teaching Assistant, Smith Engineering Winter 2025

- Selected as 1 of 3 undergraduate TAs (7 total) to support 200+ students in **Object-Oriented Programming**.
- Facilitated labs on core OOP concepts, including inheritance and polymorphism, with 90%+ satisfaction rates.

Undergraduate Teaching Assistant, Smith Engineering Fall 2024

- Guided 800+ engineering students in **Programming for Engineers I**, by teaching core **C programming** concepts such as control structures, iterative loops, debugging, and efficient coding practices.
- Led office hours and labs with a 95%+ success rate, ensuring timely completion and positive feedback.

Projects

Movement Categorization Desktop App | Python, Pandas, NumPy, Matplotlib, Scikit-Learn, PyCharm

- Developed a desktop app to classify accelerometer data as 'walking' or 'jumping' using Logistic Regression, processing input CSV files and outputting labeled results with high accuracy.
- Achieved 90% accuracy in classifying walking vs. jumping by extracting features with **Pandas** and **NumPy** and training a Logistic Regression model with **Scikit-Learn**.
- Cut preprocessing time by 25% by organizing accelerometer data into HDF5 format for efficient analysis.
- Improved model interpretability using **Matplotlib** to visualize feature relationships and classification performance metrics.

TradeLab Algorithmic App | C++, Qt

- Led a performing team of 7 developers, earning a 95% excellence rating for impactful leadership and efficiency.
- Engineered a scalable trading education platform using **C++** and the **Qt** framework, equipping beginners with interactive modules, quizzes, and simulations, and achieving a 91% user satisfaction rating
- Conducted rigorous testing and debugging to ensure a high-quality product, reducing post-deployment issues by 25% and increasing system reliability.