Kyle Tran

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Education

University Of Ottawa

Expected Graduation - December 2026

Honors Bachelor of Computer Science

Ottawa, ON

Relevant Courses: Data Structures and Algorithms, Object-oriented and Functional Programming, System Design

Technical Skills

Languages: Java, Python, JavaScript, TypeScript, SQL/PostgreSQL, C/C#, HTML, CSS, GDScript, Dart, Visual Basic

Frameworks/Libraries: Spring Boot, Bootstrap, React, Flutter, ThreeJS, NumPy, Pandas, hashlib

Developer Tools: Azure DevOps, MySQL/NoSQL, Chrome DevTools, NodeJS, JUnit, Git, Github, Playwright, Android Studio, Godot, Visual Studio Code, Figma

Other Skills: API, Web Development, Manual and Automated Testing, Accessibility, Debugging, UI/UX Design

Work Experience

Software Test Analyst | Employment and Social Development Canada

May 2024 - Present

- Conduct both manual and automated testing to ensure coverage and execution in software quality and application
 performances, utilizing testing tools such as Postman for API requests and JSON responses.
- Evaluated over **700** test cases using diverse testing practices, including **blackbox**, **integration**, **path coverage**, and **end-to-end** testing, ensuring the application consistently meets all its specified requirements.
- Monitored test runs and conducted detailed reviews, while collaborating with both development and quality assurance
 teams in an agile DevOps environment, adhering to deployment and project life-cycle practices.
- Verified data exchange between **client-server** processes, documenting bugs, parameter values and **SQL** query results to establish application limits.

Quality Assurance Tester | Department Of Justice Canada

January 2024 – April 2024

- Specialized in code **debugging** while documenting errors with a team within **Azure DevOps** therefore enhancing code quality, user accessibility and minimizing launch issues for web page deployment.
- Produced and inspected the **DOM** interface using **JavaScript** code to optimize web access navigation to be easily understandable, complying with **WCAG** and **WAI** guidelines for industry best practices.
- Ensured universal web page accessibility through **automated** testing protocols to inspect **HTML/CSS** structure and style application, utilizing **Chrome Developer Tools** such as **Lighthouse** and **axe** across **300** sites to enforce higher testing standards.

Projects

Fordward EV Tracker | uOttaHack6 | Flutter, Dart, Python, Google Play Services, Firebase, Android Studio

- Created a mobile application with **Flutter** and **Dart**, using a widget-based architecture to ensure a smooth and ease in design, optimized for easy interaction on the go.
- Incorporated automotive features like electric vehicle journey planning by leveraging **Google APIs** and **Python** scripts to provide real-time mapping and optimize routes based on battery efficiency levels.
- Employed backend integration with **Firebase** and **REST endpoints** to connect and synchronize user settings and preferences onto the app's dashboard.

SRND Audio Processing Studio | MongoDB, ExpressJS, React, NodeJS, TypeScript

- Developed a **MERN** based application to enable real-time audio manipulation directly in the browser, using the **Web Audio API** to provide playback speed, reverb space and pitch changes allowing for a creative user listening experience.
- Created the frontend by employing **React** for a responsive user interface and integrating **Bootstrap** sliders to enable seamless adjustment of various audio effects.
- Utilized MongoDB for a NoSQL database management system to store user account details and a playlist of up to 20 downloads, to provide quick availability to the listener.

DocAppoint Healthcare Management App | Java, Firebase, Gradle, Android Studio

- Led a dedicated team to develop a **mobile** appointment management system in **Java**, and **Android Studio**, built with **Gradle** to handle project dependencies, log errors and automate the app compilation.
- Implemented a login system with **FireAuth** authentication, and managed users with **Firestore** database to customize specific attributes and functions depending on the user role.
- Designed the frontend to be compatible with mobile devices using **Figma**, emphasizing on an intuitive user interface to be translated into **XML** and tested with virtual devices to debug errors.