Michael Xie

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EDUCATION

University of Waterloo — Waterloo, ON
Bachelor of Computer Science(Co-op), Human Computer Interaction Specialization — *Sept. 2022 – Present*
Relevant Courses: *Algorithms, User Interfaces, Object-Oriented Software Development*

EXPERIENCE

Developer — May 2024 – August 2024
Royal Bank of Canada*(Digital Development Security Team)* — *Toronto, ON*
- Developed and maintained projects and REST APIs for **over 5 million** clients using **Angular**, **Tailwind CSS**, **Spring Boot**, and **Postman**
- Engineered a detailed web application with **Angular** and **Spring Boot** to decode JSON Web Tokens and provide additional information about RBC Security Tokens to **over 1,000** employees, improving efficiency by **20%**
- Reduced onboarding time by **40%** by creating and deploying a token onboarding portal across multiple development environments using **Redis**, **Docker**, and **Openshift**.

Junior Analyst/Associate — May 2023 – August 2023
Royal Bank of Canada*(Law Group Technology Team)* — *Toronto, ON*
- Designed and implemented robust Web Applications using **C#** and Visual Studio, skillfully incorporating **ASP.NET MVC 5** and seamlessly integrating data sourced from **MS SQL**
- Increased efficiency by **25%** by optimizing the creation of Power of Attorney documents, employing **ASP.NET**, **Bootstrap**, and **jQuery** in website development

PROJECTS

Quizlr(GitHub) | *Android Studio, Kotlin, Java, Figma, XML*
- Engineered a **dynamic** multiple-choice quiz application using **Android Studio** and **Kotlin**, showcasing proficiency in both languages
- Crafted the application's intuitive **front-end environment**, integrated **music/SFX** functionality, and implemented quiz logic, leveraging **Activity Lifecycle** and **OOP principles**

Word Search Solver(GitHub)(Link) | *Next.js, Typescript, Tailwind CSS*
- Crafted a web application with **Next.js** in **Typescript**, dedicated to proficiently resolving word search challenges
- Levered **React Components** with **Tailwind CSS** to design an interactive and intuitive web interface
- Incorporated advanced functionality by integrating the **Tesseract.js** library, enabling Optical Character Recognition (**OCR**) to recognize and solve word search grids

Battlesnakes: Spoodersnek-42(GitHub) | *Python, AWS API Gateway, AWS Lambda*
- Partnered closely with RBC COOPs to design and implement a virtual snake using a **REST API** on the prestigious **Battlesnakes** platform.
- Devised a **sophisticated algorithm**, leveraging advanced path-finding techniques like **A* and Flood Fill**, in **Python** to elevate the strategic depth of gameplay
- Attained an impressive **top 40 status** on the competitive Battlesnakes Ladder

LEADERSHIP

Logistics Team Lead
Canadian University Software Engineering Conference — *May 2024 – Present*
- **Coordinated** with internal teams to design and promote the event agenda, employing detailed planning and effective **communication** methods to organize venues and a variety of speakers, workshops, and networking sessions

TECHNICAL SKILLS

Languages: Python, Java, C/C++, C#, SQL, Rust, Kotlin, JavaScript, TypeScript, HTML/CSS, R
Frameworks/Libraries: Angular, React, Next.js, Spring Boot, Node.js, Tailwind CSS, .NET Core, Django
Developer Tools: Git, GitHub, SSMS, Redis, Postman, Openshift, Azure, AWS, GitHub Actions, Jenkins, Swagger, Tableau, Android Studio, Figma