

Brian Xue

(647) 866-8559 | brian.xue@uwaterloo.ca | [linkedin.com/in/b-xue08/](https://www.linkedin.com/in/b-xue08/) | prmnttr.com

EDUCATION

University of Waterloo

Honours Bachelor of Mathematics, Co-op (Incoming)

Waterloo, Ontario

Sept. 2026

Bayview Secondary School

Ontario Secondary School Diploma (OSSD), Ontario Scholar, Honour Roll 2022-2026

Richmond Hill, Ontario

Sept. 2022 – June 2026

PROJECTS

TeachAssist | *React Native (Expo), TypeScript, Redux*

Jul. 2025 – Present

- Built and published a privacy-first React Native app enabling students from 30+ schools to securely access and analyze academic data, GPA calculations, and real-time notifications.
- Reverse engineered and integrated with undocumented school information systems, implementing secure session management, token handling, retry logic, offline caching, and resilient request handling across multiple schools.
- Optimized application performance through request caching, lazy loading, FlatList virtualization, and efficient state management, reducing average grade refresh latency by ~35% while supporting 2,000+ daily active users.
- Independently managed the complete product lifecycle, growing the app organically to 5,000+ downloads (4,000+ MAU), maintaining 4.8/5 on Google Play and 4.6/5 on the App Store through monthly production releases.

EXPERIENCE

Aquatic Lifeguard & Swim Instructor

City of Richmond Hill

Aug. 2025 – Present

Richmond Hill, Ontario

- Supervised pool activities, enforced safety regulations, and responded to emergencies with water rescues and first aid/CPR.
- Instructed swim lessons for children and adults, including one-on-one work with children with special needs, adapting methods and pacing to individual progress.

Junior Technical Officer

EZ-U Construction Inc

Apr. 2025 – June 2026

Richmond Hill, Ontario (Hybrid)

- Built and maintained internal digital frontend + backend tools to support operations for a construction business.
- Designed and launched a company website using Next.js and Vercel, increasing inbound client inquiries by 40%.
- Developed a backend management service with Express.js and PostgreSQL to streamline project tracking and evaluation, reducing manual processing time by 25%.
- Managed social media presence, growing follower count by 60% and boosting post engagement by 30%.

VOLUNTEER EXPERIENCE

Community Event Lead / Volunteer

City of Richmond Hill

Feb. – Oct. 2025

Richmond Hill, Ontario

- Managed public logistics and supervised booth personnel for city-wide municipal operations.
- Spearheaded crowd logistics and public educational program delivery across city events, managing group dynamics and resolving guest issues in a fast-paced environment.

CERTIFICATIONS

Lifesaving Society Swim and Lifesaving Instructor Certification – June 2025

Lifesaving Society Emergency First Aid Instructor – June 2025

Lifesaving Society National Lifeguard Certification – May 2025

CPR-C Standard First Aid Certification – February 2026

TECHNICAL SKILLS

Languages: TypeScript/JavaScript, Python, Java, SQL, HTML/CSS

Frameworks: React, React Native, Node.js, Express.js

Developer Tools: Git, Vercel, Firebase, App Store & Google Play