

Xia Han

📞 (+1) 437-661-7831 — ✉ xia.h@queensu.ca — [in LinkedIn](#) — [Github](#)

Summary — Master's graduate in Electrical and Computer Engineering with 5 years of industry experience in testing and development. Hands-on experience with JavaScript/React, Java, C# and Python, with a strong background in automation tool development and problem-solving. Seeking to apply technical expertise and adaptability in a Software Engineer role.

Skills & Certificates

- **Technical:** JavaScript, React, HTML, CSS, Java, C#, C++ , Python, Performance Analysis, Cryptography & Network Security, AI for Cybersecurity, Machine Learning & Deep Learning, API Testing, Automated Testing, Git, Postman
- **Transferable:** Problem-solving, Attention to Detail, Quick Learner, Communication, Team Collaboration
- **Language:** English(Proficient), Chinese (Native)
- **Certificates:** [Programming Languages, Part A](#), [Responsive Web Design](#), [JavaScript Algorithms and Data Structures](#)

Education

Master of Engineering	Queen's University	Kingston, ON, Canada	09/2024 – 07/2025
• Major: Electrical and Computer Engineering			

Industry Experience

Test Development Engineer	Manycore Tech	Hangzhou, ZJ, China	09/2020 – 11/2023
<ul style="list-style-type: none">• Partnered with an Agile team of eight across the lifecycle of a cloud-based SaaS platform for the interior design industry, from early ideation and design reviews to final release, driving improvements in test coverage and testing efficiency.• Led the design and implementation of automated and manual testing strategies, resolving 2,000+ defects and ensuring 100% on-time release across multiple sprints.• Independently developed a web-based internal tool using JavaScript and React to visualize complex quotation logic and calculation flows, enhancing cross-team issue traceability and reducing QA turnaround time by 40%.			
Equipment Development Engineer	H3C	Hangzhou, ZJ, China	09/2018 – 09/2020
<ul style="list-style-type: none">• Engineered and implemented systematized functional testing strategies to validate the quality of new switch models, collaborating across teams to ensure reliability and performance.• Improved team efficiency by developing three automation tools:<ul style="list-style-type: none">– Traffic Tester (C#): Validated network traffic transmission stability.– Register Converter (C#): Streamlined data conversion between 64-bit registers and decimal formats.– Web Crawler (Python): Automated data scraping and analysis with Excel export.			

Research Experience

Associate Researcher	Queen's University	Kingston, ON, Canada	04/2025 – 07/2025
<ul style="list-style-type: none">• Independently formulated and executed a summer research project on watermarking algorithms for AI-generated text.• Studied SynthID-Text's detection mechanism and developed four attack strategies to evaluate its robustness.• Designed a novel watermarking method to improve robustness, boosted F1 scores by 11% across all tested attack types.• Authored a technical paper on text watermarking algorithms, accepted by IEEE TrustCom 2025 conference.			

Web Project

- **Formula Query Website (2022):** Engineered and implemented a web application that queried backend APIs to retrieve calculation formulas and displayed step-by-step results, improving accessibility and accuracy of quotation usage.

Community Service & Volunteer Work

- **Volunteer Guider**, Girl Guides of Canada, Kingston, ON: Collaborate weekly with four co-guiders to organize activities for 24 girls (ages 7–9), fostering personal growth and positive development (10/2024 - Current)
- **Sales Associate**, YGK Thrift, Kingston, ON: Assisted at a non-profit vintage thrift store by handling donations, sorting inventory, delivering professional customer service, and assisting customers with product selection.(06/2025 - 08/2025)