

Ethan Tran

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EDUCATION

University of Waterloo <i>Bachelor of Applied Science in Computer Engineering</i>	2025 – 2030
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TECHNICAL SKILLS

Languages: Swift, Java, HTML, CSS, C#, C++, Python

Frameworks/Tools: Unity, Xcode, VScode, Visual Studio

EXPERIENCE

Software Developer Lead	Sep. 2023 – Jun. 2025
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Saltfleet Parliament

- **Led the design and development** of the Saltfleet Commons website with a team of 3 developers.
- Collaborated to ensure effective **UI/UX design** and **front-end development**.
- Oversaw project timelines and ensured on-time delivery of key milestones.
- Conducted regular team meetings to track progress and resolve development challenges.

Organizer / Software Developer	Jun. 2024 – Dec. 2024
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HammerHacks

- Created the HammerHacks landing page, which attracted **150+ participants with a 90% pull rate** and secured **over \$12,000 in sponsorships and donations**.
- Organized HammerHacks where 150 students across Hamilton coded together at McMaster for 12 hours.
- Led trivia and math games to foster a collaborative and engaging environment that promoted peer learning.
- Provided technical support and was responsible for software tools and infrastructure throughout the event.

App Developer	Feb. 2024 – Jun. 2024
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Swift Kids

- Designed and optimized mobile application interfaces using **Swift**, completing **10+ projects** to improve user experience and app performance.
- Proficient in **Swift** for app development, with a focus on **UI programming** and interface design.
- Developed expertise through project-based learning, completing tasks across the full app development cycle.
- Collaborated with a team of 4 developers to conceptualize, design, and present iOS app solutions.
- Spearheaded the design, development, and presentation of multiple Swift-based applications.

Camera Operator Director	Feb. 2024 – Mar. 2024
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OFSSA

- Ensured smooth operation and high-quality production for OFSAA basketball, broadcasted to **7,000+ viewers**.
- Directed and optimized live stream operations, managing cameras and technical setups.
- Cross-trained in various roles, enhancing team flexibility and efficiency.
- Implemented improvements in streaming infrastructure, boosting viewer engagement and **reliability by 40%**.
- Streamlined event workflow to enable seamless execution during live broadcasts.
- Managed equipment setup and troubleshooting to ensure full operational readiness before and during the event.

PROJECTS

Power Rangers Morpher | *Electronics, CAD, RFID*

- Designed and built a Gundam-themed Power Rangers morpher for GitHub HQ hackathon combining aesthetics with functional electronics.
- **Implemented RFID technology** for short-range wireless detection and activation.
- Developed a handheld device that lights up upon card insertion.
- Incorporated Gundam-inspired wings in the CAD to enhance the visual and mechanical design.

TetriPad | *Electronics, Firmware, Embedded Systems*

- Built the Tetripad, a custom hackpad designed for precision Tetris gameplay.
- Engineered a 4-switch pyramid layout inspired by the classic D-pad for intuitive control.
- Programmed custom **firmware** to handle responsive input and OLED screen feedback.
- Integrated **hardware** and **software** by combining wiring, coding, and real-time interaction.
- Delivered a reliable and interactive device, showcasing skills in **electronics, microcontrollers, and embedded systems**.