

Ethan Trinh

(647)-936-6376 | ethan.trinh4@gmail.com | [LinkedIn: Ethan Trinh](#) | [GitHub: trinhee](#)

EDUCATION

Western University

London, Ontario

B.S. - Specialization in Computer Science

Expected Graduation, May 2026

- **Related Coursework:** Data Structures & Algorithms, Object-Oriented Programming, Operating Systems, Software Engineering, Computer Architecture, Applied Logic, Databases, Linear Algebra, Discrete Structures.

EXPERIENCE AND LEADERSHIP

Invisual E. Inc.

Toronto, Ontario

Software Developer Intern

May 2024 – Aug 2024

- Designed and implemented real-time control systems using **C++** and **.NET**, optimizing manufacturing automation processes and achieving a **15% reduction in system downtime**.
- Developed intuitive, user-friendly applications with **.NET**, enabling operators to monitor and manage production processes in real time, improving operational efficiency.
- Created data analysis tool leveraging **SQL** and **PowerBI**, improving process monitoring and predictive maintenance through advanced analytics and real-time insights.

Western AI

London, Ontario

Associate

Sept 2022 – April 2024

- Collaborated on a project to develop a **machine learning** model for predicting student performance, **leveraging Python and TensorFlow** to identify key factors influencing academic success.
- Participated in a 48-hour **hackathon** to create a computer vision-based solution for campus safety, utilizing **OpenCV** for real-time object detection in camera footage.
- Attended workshops on **AI fundamentals**, including hands-on training with frameworks like **TensorFlow**, helping students build practical machine learning skills.

ByteKode Hackathon

Toronto, Ontario

Event Organizer

April 2021 – Aug 2022

- Organized and facilitated two successful non-profit hackathon events for novice programmers, introducing **200+ attendees** to basic programming concepts such as **API usage** and **JSON** parsing.
- Secured sponsorships from **12+ organizations**, contributing to a prize pool worth **\$22,755** for participants.

PROJECTS

Daily Odds Scraper and Expected Value Calculator | JavaScript, Node.js, Discord API, Axios

Solo Project

June 2024

- Developed a **JavaScript**-based scraping and expected value calculation tool, generating **\$3,600 in monthly revenue** from **180+ premium subscribers** and achieving a **27% monthly ROI** in sports betting.
- Implemented automated notifications via **Discord API**, leveraging **JSON** for data storage and **Axios** for real-time data retrieval; **resolved CORS issues** by configuring Axios proxy protocol.
- Parsed **100,000 bets monthly** from Canadian sports books across multiple sports (football, basketball, soccer).

Hand Drawing to LaTeX | Python, React, TensorFlow, OpenCV

Case-Competition

Nov 2023

- Designed a **convolutional neural network** with **TensorFlow**, utilizing **machine learning** to achieve a **97% testing accuracy** in predicting mathematical symbols from images.
- Deployed a full-stack web application utilizing **React** and **Flask API**, allowing users to create and upload hand-drawn mathematical expressions for classification.

SKILLS

Languages: Python, Java, HTML/CSS, JavaScript, Typescript, SQL, C, C++, Kotlin, Swift, Assembly, Bash, LaTeX

Libraries & Frameworks: React.js, Node.js, Next.js, Vue.js, Three.js, Tailwind CSS, ASP.NET, Spring Boot, Flask, jQuery, OpenCV, TensorFlow, Bootstrap, OpenGL

Cloud: AWS (S3, DynamoDB, Lambda, API Gateway, ELB, SNS)

Other: Docker, Git, Unix, Linux, UML, MS Office (Excel, Outlook, Teams, Word, PowerBI)