

Edward He

(+1)647-615-0823 | [Email](#) | [LinkedIn](#) | [GitHub](#) | [Repl.it](#) | [Personal Site](#) | Canadian National

EDUCATION

University Of Ottawa

Master of Applied Science in Electrical and Computer Engineering (Applied Artificial Intelligence)

Ottawa, ON, Canada

Jan. 2026 – Dec. 2027 (*expected*)

- Received \$37,500 in funding over 2 years (scholarship, research, and teaching assistantship).
- Research focused on CUDA Graphs and real-time AI computing.

University Of Ottawa

Honours Bachelor of Science with Major in Computer Science and Minor in Mathematics

Ottawa, ON, Canada

Sep. 2021 – Jun. 2025

- Maintained a GPA of 80.
- Completed coursework in Algorithm Design, Software Engineering, Data Structures, Computer Architecture, Databases, User Interfaces, Discrete Structures, Statistics, and Calculus.
- Dean's Honour List: 2022 winter, 2024 winter.
- Awarded \$3000 Admission Scholarship for academic excellence.
- Secured \$1000 First Year Merit Scholarship for strong academic performance.
- Received \$1000 Eng.WivesAssociation Ottawa Bursary.

EXPERIENCE

Junior Software Developer - VBA Automation Script

June 2022 – August 2022

Asiacom-Americas

Dulles, Virginia, U.S.A.

- Developed an automation script that consolidated weekly employee reports into a bi-weekly summary.
- Improved the script's performance to $O(n)$, significantly reducing the HR team's workload.
- Adopted a modular approach to improve code readability and maintenance.
- Enhanced operational efficiency and reduced costs by automating report conversion.

Junior Software Developer - Laptop Application

July 2023 – September 2023

Nanjing Unitech Electric Power Company

Remote Working

- Developed the "UnifiedMonitor" application to fetch real-time solar panel data from manufacturers' websites.
- Used Selenium, Guava, and Jsoup for web automation and HTML parsing.
- Designed a data-fetching algorithm with $O(n^2)$ complexity to improve performance.
- Created a user-friendly interface with a dynamic SVG illustration for real-time data.

AI Trainer

Jan 2024 – Aug 2024

Outlier AI

Remote

- Improved the performance of AI models by refining response accuracy and contextual understanding.
- Created solutions to enhance the AI's problem-solving capabilities.
- Developed content to enhance the AI's writing proficiency and coherence.
- Performed analyses to identify areas for further model improvement.

Software Developer

July 2025 – Present

Nanjing Vanju Technology

Nanjing, China

- Collaborated with the development team to enhance the front-end and back-end features of the company's applications.
- Developed and integrated a waveform chart visualization using Vue.js to display time-based data more effectively.
- Implemented and tested backend routes using Java Spring Boot to support front-end interactions and ensure smooth data flow.
- Contributed to improving the user interface by designing responsive components for data presentation.
- Worked closely with cross-functional teams to ensure that both front-end and back-end components aligned with project requirements.

PROJECTS

CUDA Glow Effect | *CUDA, TensorRT, OpenCV*

Jan 2025 – May 2025

- Developed a high-performance image and video processing application with dynamic glow effects.
- Utilized CUDA Graphs to optimize segmentation inference and improve real-time performance.
- Designed a parallel mipmap pipeline with triple buffering to increase throughput.

Course Booking App | *Java, SQL, AndroidStudio*

September 2022 – December 2022

- Built an Android app for scheduling and account management with a dynamic user interface.
- Used JUnit for testing to ensure the app's reliability and maintainability.

Hotel Database Management System | *Java, HTML, JSP, PostgreSQL, IntelliJ*

January 2023 – May 2023

- Developed a hotel management system with a PostgreSQL database, automating tasks with triggers.
- Created responsive backend utilities and user interfaces for real-time operations.

Stopwatch App | *React, JavaScript, CSS*

January 2024

- Designed and developed a React-based stopwatch application with modern web practices.
- Utilized React state management and hooks for a responsive UI.
- Created test suites using React Testing Library and Jest for ensuring app reliability.

TECHNICAL SKILLS

Languages: Java, Python, C/C++, SQL (PostgreSQL, MySQL), JavaScript, HTML/CSS, **C#**

Frameworks: JUnit, Python Unit Test, Node, REACT, Spring Boot

Developer Tools: Microsoft Azure, Android Studio, Maven, CUDA, Docker

Libraries: Pandas, NumPy, Tkinter

CERTIFICATES

Microsoft Azure AZ-900