

Edward He

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

EDUCATION

University Of Ottawa <i>Master of Applied Science in Electrical and Computer Engineering (Applied Artificial Intelligence)</i> • Admitted with \$37,500 in total funding over 2 years (scholarship, research, and teaching assistantship). • Thesis research with focus on CUDA Graphs and real-time AI computing.	Ottawa, ON, Canada Jan. 2026 – Dec. 2027 (expected)
University Of Ottawa <i>Honour Bachelor of Science with Major in Computer Science and Minor in Mathematics</i> • Good Academic Standing at 80 GPA • Undertook comprehensive coursework: 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 recognizing outstanding performance. • \$1000 Eng.WivesAssociation Ottawa Bursary	Ottawa, ON, Canada Sep. 2021 – Jun. 2025

EXPERIENCE

Junior Software Developer - VBA Automation Script <i>Asiacom-Americas</i> • Conceived an automation script streamlining the consolidation of weekly employee reports into a singular bi-weekly report. • Achieved an impressive script performance of O(n), drastically diminishing the HR team's workload for pay report conversion. • Employed a modular programming approach, segmenting the script into distinct functions for maintainability. • Enhanced code readability and simplified adaptation for developers. • Amplified operational efficiency twofold by eliminating manual report conversion. • Achieved a 10% cost reduction in report conversion by automating processes.	June 2022 – August 2022 Dulles, Virginia, U.S.A.
Junior Software Developer - Laptop Application <i>Nanjing Unitech Electric Power Company</i> • Spearheaded the creation of the "UnifiedMonitor" application to fetch real-time solar panel data from manufacturers' websites. • Utilized Selenium, Guava, and Jsoup for web automation and HTML parsing. • Implemented a data-fetching algorithm with O(n ²) complexity for optimal retrieval. • Developed a robust wait-and-check mechanism to capture required web elements. • Designed a user-centric interface with a visually appealing SVG illustration for real-time data representation. • Facilitated device comparisons by consolidating information into a single dashboard.	July 2023 – September 2023 Remote Working
AI Trainer <i>Outlier AI</i> • Optimized AI model performance by refining response accuracy and contextual understanding. • Developed advanced code solutions to enhance the AI's problem-solving capabilities. • Crafted precise content to improve the AI's writing proficiency and coherence. • Conducted comparative analysis to identify key areas for model improvement.	Jan 2024 – Aug 2024 Remote

PROJECTS

CUDA Glow Effect <i>CUDA, TensorRT, OpenCV</i> • Developed a high-performance image and video processing application applying dynamic glow effects. • Leveraged CUDA Graphs to accelerate segmentation inference, significantly reducing kernel launch overhead and enabling real-time performance. • Implemented a parallel mipmap pipeline with triple buffering and non-blocking streams, boosting processing throughput over previous versions. • Recognized as a school honours project, showcasing advanced GPU programming and real-time computer vision techniques.	Jan 2025 – Present
Course Booking App <i>Java, SQL, AndroidStudio</i> • Developed a dynamic Android application with a responsive front-end and robust SQL database for scheduling and account management. • Engineered adaptive layouts to optimize usability for various user roles. • Incorporated comprehensive JUnit testing to ensure reliability and maintainability.	September 2022 – December 2022
Hotel Database Management Simulation System <i>Java, HTML, JSP, PostgreSQL, IntelliJ</i> • Orchestrated an advanced hotel management solution providing effortless administrative experience. • Architected a resilient PostgreSQL database system with triggers, hierarchical structures, and table associations for seamless automation. • Developed comprehensive backend utilities and responsive UI elements to facilitate real-time operations.	January 2023 – May 2023
Stopwatch App <i>React, JavaScript, CSS</i> • Designed and implemented a React-based stopwatch application with modern web development practices. • Utilized state management and hooks in React for a responsive user interface. • Developed comprehensive test suites using React Testing Library and Jest to ensure reliability. • Deployed the application on Microsoft Azure.	January 2024

TECHNICAL SKILLS

Languages: Java, Python, C/C++, SQL (Postgres, MySQL), JavaScript, HTML/CSS

Frameworks: JUnit, Python Unit Test

Developer Tools: Microsoft Azure, Android Studio, jpackage, Maven, CUDA (parallel programming on GPUs), Docker

Libraries: Pandas, NumPy, Tkinter

CERTIFICATES

Microsoft Azure AZ-900