

# Blair Wang, MEng

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## HIGHLIGHTS OF QUALIFICATIONS

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- 2024 New Grad Seeking for **Internship and Full-time** Opportunities
- Master of Software Engineering professional with 4+ years' experience in Full Stack Development, and Data Management.
- Hands-on experience with Frontend; Backend; UI/UX design; Testing; Deployment; Cloud Computing; BI development; Natural Language Processing (NLP); Machine Learning
- Extensive knowledge of JavaScript, HTML, CSS, React, Redux, Typescript; Python3, Java, C#; Git; Node.js, ExpressJS, PostgreSQL, MongoDB, MySQL; Figma, Adobe XD, Adobe Photoshop; Restful WebServices, Postman; GitHub Page; Agile; Visual Studio code, Google Colab, IDLE, Pycharm, VScode community; Google Cloud Platform(GCP); Agile; Windows, macOS, Linux, Microsoft Visio, PyTorch; MATLAB, Tableau.
- Valid G2 driver's license | Willing to Relocate across Ontario

## EDUCATION

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**University of Western Ontario** **London, ON**  
Master of Software Engineering | Software Development, Computer Engineering | GPA: 3.7/4.0 09/2023-Expected 08/2024

**Queen's University** **Kingston, ON**  
Bachelor of Science | Computer Science, Artificial Intelligence | GPA: 3.7/4.3 09/2019-05/2023

- Principal Scholarship; Dean's List

## PROFESSIONAL EXPERIENCE

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**Data Engineer | H-Pharma Medical Storage** 05/2022-09/2022

- Developed a medicine recognition software installed in Auto-Medicine Dispensing Machine in pharmacies, for alcohol, animal medicine, pesticides, etc.
- Implemented medicine identification and visualized the data based on prescription data and patient information by developing and training Machine Learning models using Python (Pandas; NumPy; TensorFlow and sci-kit-learn)
- Enabled image recognition of medication labels and parsing of prescription texts by employing convolutional neural networks (CNNs) and natural language processing (NLP)
- Prepared weekly, and monthly progress reports and presented them to the IT manager, full stack developers

**Full Stack Development Project Lead | University of Western Ontario** 07/2023-12/2023

- Designed and developed an online shopping website with frontend using React and JSX for interactive components, and a backend powered by Node.js and Express. Key functionalities include user registration, login, password updates, search, shopping cart management, and order placement.
- Developed a real-time product database using MongoDB and kept product information updated through Express and Mongoose.
- Implemented a database for storing user and order data using RESTful API
- Developed the email verification function for user login using the npm email verification library
- Enabled payment method using Stripe by integrating its API for secure credit card processing and setting up a server-side endpoint to handle payment requests and responses

**Algorithm Development Project Lead | Queen's University** 12/2022-04/2023

- Analyzed and visualized Toronto's traffic networks into a table and dashboard using community detection algorithms, to optimize urban traffic management and reduce congestion
- Achieved 83% prediction accuracy by ranking 3 algorithms: Louvain, Leiden, and K-means algorithm
- ETL (Extract, Transform, Load) 30k lines of traffic data (roads, time, traffic volume, traffic light, etc. ) collected from the Government of Canada using Python
- Conducted 120+ literature reviews and summarized findings, methodologies, and lessons learned
- Prepared a traffic improvement plan and analysis report for the City of Toronto's daily transportation

**Machine Learning Project Lead | University of Western Ontario** 09/2023-01/2024

- Developed weather forecasting app using different machine learning models.
- Achieved 82% accuracy by ranking 5 models, including a combined model(CNN&LSTM)
- Conducted web scraping for 15 years of weather data collected from Canadian Weather.

**Game Design Project | Adventure level & Battle Game | Unity Engine & C#, University of Western Ontario** 10/2023-02/2024

## CERTIFICATIONS & ADDITIONAL INFO

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- **Node.js, Express, MongoDB & More: The Complete Bootcamp 2024** certified by Udemy
- **Interests:** Yoga, Dancing, Web Development, Tennis, Volunteer work
- **Language:** Fluent in English and Chinese