

Negin Amou

Developer | Analyst | Researcher

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Highlights of Qualification

- Master of Data Science and Artificial Intelligence from University of Waterloo (CGPA 3.85)
- Bachelor of Computer Science and Mathematics (CGPA of 4.24)
- 4 years of work experience in the industry as a developer, analyst and researcher
- Experienced using machine learning algorithms, Gen AI, and data science techniques to clean, explore, and draw meaningful conclusions from a dataset
- Demonstrated proficiency in databasing using MySQL, Oracle and Postgres
- Proficient in Python, C# (WinForm and WPF), PHP, JavaScript, HTML/CSS, and Power BI
- Industry experience in data engineering and data science, including preprocessing noisy data, performing statistical analysis, and using programming tools to develop ETL pipelines, generate analytical reports, and create intuitive data visualization

Relevant Work Experience

AI Computer Vision Researcher **Waterloo University** **May 2025 – Present**

- Worked under the supervision of **Professor Haas** and sponsored by **Ontario Power Generation (OPG)**, automate segmentation and templating of **3d point clouds** by **training AI models**
- Developed **Bill Of Material Platform (BOM)** to store and categorize nuclear facilities' structural components
- Developed automated and human guided solutions to accurately estimate point cloud's area, volume and shape category
- Developing web application user interface with **Python Flask and Postgres database**
- Utilizing **machine learning** and **data science** techniques to clean, categorize and process point cloud data

IT Contractor **Action Aero** **Sep 2024 – June 2025**

- Maintained and debugged existing IT systems
- Provided **consultations** and researched IT solutions to IT department
- **Communicated with users** to implement desired features and solutions

IT Analyst **Action Aero** **May 2021 – Aug 2024**

- Worked on **programming, documenting, and debugging** custom-made software such as Shipment Estimator, CRM, OEM, and other ongoing projects
- **Automated** and optimized daily processes scripting in **PowerShell** and **Python**
- Created need-based applications using **C# (WinForm/WPF)**, **PHP**, and **database management systems (Oracle & MySQL)**
- Conducted data analysis and reporting to identify patterns in production, inventory, and turnaround time using **Oracle** and **MySQL** databases, **Crystal Reports**, **Power BI**, and **Excel**
- Generated analytical reports, and created intuitive **data visualization**

Angular Developer **Maximus Canada** **Jan 2021 – Apr 2021**

- Used **Angular framework** and **TypeScript** to develop web-applications

- Developed technical designs according to functional specifications and participated in design reviews
- Performed **unit and integration testing** to ensure proper and efficient software execution
- Supported systems in test and production environments by debugging issues

Cybersecurity Analyst

Invesco Ltd.

Sep 2020 – Dec 2020

- Worked with **SIEMS tools** to protect, detect, prevent, and respond to cyber threats
- Automated threat detection for firewall using MineMeld to aggregate threat information

Tech Lead

University of Prince Edward Island

Jan 2023 – May 2023

- Led the Virtual Wellness project with a **team of six developers**
- Used **PHP** for back-end development and **JavaScript/CSS/HTML** for front end
- Wrote extensive **unit tests** and **security documentation** for the project
- Managed the Git repository to ensure seamless collaboration

Education

Master of Data Science and Artificial Intelligence

University of Waterloo

Sep 2024 – Dec 2025

- Winner of **Scotia Bank Entrance Scholarship (CAD 10,000)**
- **CGPA 3.85/4**
- Worked as **Teaching Assistant** in CS 136L to answer students' questions and help them with course material

Bachelor of Science in Computer Science and Mathematics

University of Prince Edward Island

Sep 2019 – May 2023

- **Winner of "School of Mathematical and Computational Sciences Graduating Student Award" (Highest GPA in the department)**
- **CGPA: 4.24/4.3**
- Academic Excellence Award (2019-2023)
- Dean's Honours List (2019 – 2020 & 2021 – 2022)
- Authored technical papers on cybersecurity topics, including OSINT, network security, web application security, cryptography, and AI in cybersecurity

Certifications and Projects

- **Agile Methodology certification** (Six Sigma) Yellow Belt and Greenbelt certified
- Point cloud human guided **AI solution to classify industrial components** and estimate their volume & Area
- Developed **image recognition CNN** to classify and recognize objects
- AI handwriting recognition software
- **CRM:** Developed a Customer Relationship Management system tailored to enhance client interaction tracking and sales processes using **C# (WinForm/WPF)** to create a desktop program
- **OEM:** Designed and implemented a system for managing Original Equipment Manufacturer (OEM) part tracking and integration into production workflows using **PHP, HTML/CSS and MySQL/Oracle**
- **Shipment Estimator:** Estimated shipping timelines, streamlining logistics and improving efficiency
- **Quality Control Alert System:** Automated alerts for quality control issues to ensure timely detection and resolution, enhancing production standards using **C# and PHP** as backend languages