

# RAPHAËL ONANA

+1 613 920 5228

✉ [onanaraphaelnathan@gmail.com](mailto:onanaraphaelnathan@gmail.com)

🌐 [LinkedIn](#)

🐙 [GitHub](#)

🌐 [website](#)

## Experience

### Caterpillar Inc.

Jan 2025 – Apr 2025

#### Software Designer

Montreal, Canada

- Leading the migration of CI/CD pipelines from Azure DevOps Server Pipelines to GitHub Actions by creating a detailed migration plan to support the company's transition to GitHub Enterprise. Working closely with the Team lead to identify requirements, write user stories, and ensure alignment with organizational goals.
- Integrated the GitHub Actions Importer into existing workflows, achieving up to 80% accuracy in pipeline translation. Documented the entire migration journey, identifying and addressing key challenges
- Optimized a pipeline by implementing toolchain and dependency caching, reducing workflow runtime by 45%
- Contributing to designing and implementing embedded software for autonomous drilling machine systems, utilizing Linux and docker in a scaled Agile team environment.

### Ford Motor

May 2024 – Dec 2024

#### Test Automation Engineer

Ottawa, Canada

- Automated weekly manual token update process for stations using Python and Jenkins, reducing task time by 90%. Developed a pipeline to streamline logging into nodes, processing device data, and generating JSON files, significantly improving efficiency and saving hours of work
- Demonstrated leadership by mentoring a new intern, helping acclimate to the team's workflows and tools. Provided guidance on using test automation tools, debugging processes, managing test executions, and effective lab management
- Gained practical experience with several automotive and electronic hardware such as Sync Infotainment, Telematics hardware, Arduino, breakout and relay boards, while setting up and maintaining test stations that simulated in-vehicle environments, using command-line tools to manage and debug software and hardware-related issues, and utilizing defect tracking systems to log, monitor, and resolve issues
- Developed a Python script using Pandas and NumPy to automate weekly station failure reports, automating 100% of manual Excel data processing, optimizing data analysis, and providing graph plots for further insights

## Projects

### FoodBank Ai – Hackathon uOttawa | *Python, Flask, Pytorch, Numpy, Postgresql, React*

Ottawa | Sep. 2024

- Led the front-end development of FoodBank Ai, a gamified web app encouraging food donations, using React and Bootstrap, ensuring an engaging and user-friendly experience
- Refined and optimized API data before transmitting it to the backend, ensuring precise nutritional value calculations and accurate point allocation for user donations. Manually Trained an AI model on this data, achieving approximately 75% accuracy in recognizing fruits presented to the camera

### Carleton University Webring | [cu-webring.org](https://cu-webring.org)

Ottawa | Jan 2025

- Collaborated in the creation of Carleton Webring, a platform for Carleton University students and alumni to showcase their personal websites and portfolios, enhancing visibility and networking opportunities
- Contributed to developing and maintaining the website, ensuring user experience and accessibility for the university community.

## Education

### CARLETON UNIVERSITY

Sep '22 - Present

*B.S Computer Science Honors, AI/ML Stream & Maths*

Ottawa, ON

GPA: 11.75/12.0

### Relevant Coursework

- |                                  |                         |                        |                          |
|----------------------------------|-------------------------|------------------------|--------------------------|
| • Data Structures and Algorithms | • Object Oriented Prog. | • Software Engineering | • Calculus, Statistics 3 |
|                                  | • Systems Programming   | • Web development      | • Discrete Mathematics   |

## Technical Skills

**Programming Languages:** Python, Typescript, Javascript, Java, C, C++, HTML5/CSS

**Developer Tools:** Git, GitHub, Azure DevOps, Jenkins, GitHub Actions, Docker, Putty, Grafana, Linux, bash, Jira

**Frameworks:** Pandas, NumPy, NextJs, React, NodeJs, MongoDB, SQL, Tailwind, Bootstrap, AWS Cloud Practitioner

**Languages:** English, French