

Co-Op Embedded Software Engineer

Company Overview

Gastronomous is a fast-paced, dynamic start-up focused on revolutionizing how food is prepared and enjoyed worldwide! Having developed Canada's first <u>fully autonomous kitchen</u>, Gastronomous realizes the "Kitchen of the Future" through advanced industrial automation techniques and cutting-edge technologies.

We are a no-nonsense team of passionate people with a bias for action. We know that our ability to execute on our ideas is what sets us apart. We do what we say we are going to do, externally and internally. We trust our people to act independently and make practical, real-world decisions.

If you are passionate about developing meaningful technology that creates meaningful solutions, then Gastronomous is the place for you! By joining our team, you will be immersed in a dynamic and thought-provoking environment that tests your capabilities and pushes you to new heights.

Gastronomous is looking for an **Embedded Software Engineer** who will be a central part of our core engineering team and will work closely with the mechanical and electrical teams to design and implement embedded software solutions for real-time control, sensor fusion, and motion planning. This role is geared towards an individual with a can-do attitude and demonstrated passion for innovative technology as well as research & development. As well, someone who can accelerate/improve the quality of our platform's software through test-driven development.

Primary Responsibilities:

- Analyze and process sensor data to extract meaningful insights and enable intelligent decision-making within the robotics system.
- Integrate new and existing software into new and existing machinery.
- Debug the software on the embedded systems to fix issues and bugs.
- Detailed documentation of the software design of the systems and interfaces.
- Iterate on code, refactoring repeatedly to improve our software generality.
- Create unit tests and system-level tests to verify code functionality.
- Build automated testing system to ensure software reliability.
- Implement user interfaces following defined requirements and design.
- Coordinate with hardware engineers and other staff to forecast whether the design will be feasible under cost and time constraints.



Requirements:

- Proven experience in embedded systems design with pre-emptive, multitasking real-time operating systems.
- Strong programming skills in Python.
- Proficient in C++.
- Experience developing on a Linux based platform.
- Understanding of functional programming and design patterns.
- Experience using git for source control.
- Solid understanding of embedded systems development, including microcontrollers, firmware, device drivers, and real-time operating systems.
- Familiar with clean-coding principles.

Preferred Skills and Experience:

- Experience in robotics and machine automation.
- Familiarity with sensor fusion techniques, motion planning algorithms, and navigation systems for robotics.
- Strong troubleshooting skills.
- Mechanically inclined.

Soft Skills:

- Must be able to communicate thoughts and ideas effectively.
- Must be able to work independently and with a multidisciplinary team.
- Organized and efficient, able to self-manage projects and present deliverables on time or communicate delays.
- Detail oriented with regards to machine development
- Ability to work in a collaborative team environment and effectively communicate complex technical concepts.
- Strong problem-solving skills, attention to detail, and a passion for creating innovative robotics solutions.

If you are passionate about robotics and have a strong desire to build products of the future, please apply today.

We look forward to reading every application and welcoming a new, bright mind to Gastronomous shortly!

If interested, please send your resume and any other relevant information to: careers@gastronomous.ca

