

**Position Title:** Embedded Software Development Engineer (Co-op)

**Job Brief:**

Passionate software engineer Co-op driven to solve real industrial problems within the space of sensors, embedded systems, and wireless M2M.

**Background:**

Established in 2009, NZ Technologies Inc. (NZTech) works in the field of Human Machine Interaction (HMI) with specialization in touchless sensor, 3D machine vision and learning algorithms. NZTech's proprietary software and hardware are designed and built in-house at our office in Vancouver, BC. Our core products, TIPSO™ and HoverTap™ are proprietary technology that has evolved from the technical expertise and unique industrial experience of our engineering team, with significant feedback from our team of experienced advisors from the medical and elevator fields.

The TIPSO products are award-winning Human-Machine Interaction (HMI) devices for Interventional Radiologists and surgeons who need to efficiently interact with radiology images in the Operating Room (OR). It is designed by doctors, for doctors, to fit seamlessly in their challenging work environment. NZTech is continuously working with VGH and other hospitals to research, develop, and deploy new sensing technologies in the Operating Room to aid doctors in their critical work.

HoverTap™ Lift is a new way to touchlessly and safely use elevators. Easily retrofitted to existing buildings, the HoverTap™ panel allows for simple hand-wave and finger-point interactions – getting you to your destination without a single touch. With the danger of disease transmission becoming an everyday threat in the 'new normal', HoverTap™ eliminates high-touch surfaces in the elevator and keeps you and your loved ones safe.

**Job Description:**

A new co-op is desired to join the team and work on developing new embedded software applications and products.

The employee's duties will fall under the following areas:

- Developing embedded applications for deployment on Windows and embedded Linux
- Developing interactive GUIs and other user-facing interfaces
- Designing communication routines for embedded microcontrollers and microprocessors
- Revamping and extending existing network communication routines
- Optimizing existing codebase for real-time implementation

- Managing all software testing, stable build releases, and version control repositories
- Actively working with the team to brainstorm, discuss, and solve technical problems

***Required Skills/Experience:***

The prospective candidate will have a background and interest in:

- OO programming in C, C++, and Python
- Embedded data processing techniques and communication protocols
- Network coding and Server-client infrastructures
- Bash scripting and automation practices
- Collaborating via version control software (i.e. Git)
- Experience with encryption and network sniffing is an asset
- Experience with sensor processing algorithms is an asset
- Professional documentation practices
- Effective at independent problem-solving
- Good communication skills (informal and formal)

Located in the lively and energetic district of Vancouver, the office environment is young and friendly while full of exciting intellectual challenges. The ideal candidate would embrace the fast-paced start-up environment and be ready to learn new skills as needed. The company is going through rapid growth and varying schedule should be expected. The nature of this position offers outstanding opportunities for career growth and fun challenges outside of a typical 9-to-5 job. Join us if you think you are the right candidate!