JOB DESCRIPTION FOR:
INTERMEDIATE EMBEDDED SOFTWARE ENGINEER

JOB BRIEF:
A highly driven individual is sought to join our diverse engineering team for a permanent full-time position. The primary duties involve developing and managing embedded software/firmware and working with state-of-the-art sensors to deploy new products. The successful applicant will manage the company's embedded software in products designed and manufactured by NZ Technologies Inc.

BACKGROUND:
Established in 2009, NZ Technologies Inc. (NZTech) works in the field of Human-Machine Interaction (HMI) with specialization in touchless sensors, 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.

TIPSO™ is an award-winning Human-Machine Interaction (HMI) line of products 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:
Do you want to join a rapidly growing team that is working on cutting-edge technology and deploying products in multiple industries? NZTech is looking for a passionate engineer that is keen on solving dynamic problems and driving meaningful changes within a cohesive engineering team. The position will focus on working within the engineering team (including both software and hardware-focused individuals) – including, but not limited to, developing and managing embedded software codebases, sensor/signal processing routines, and software development for Linux and Windows applications. The ideal candidate will have a strong background in working with embedded systems and firmware development – they will be comfortable managing the company's codebases, working with embedded Linux SBCs, microcontrollers, and various development environments.

The successful candidate will work closely with the engineering team in not only software/firmware development, but also embedded microelectronics and sensors. The position not only offers tremendous learning opportunities, but also great potential for career advancement. Most importantly, you will join a high-tech start-up to make a direct impact on the company's growth.

DUTIES/RESPONSIBILITIES:

- Develop and manage embedded software for embedded Linux controllers and microcontrollers as critical components of NZTech hardware products
- Develop and manage Linux and Windows software applications that interact with NZTech products
- Work with NZTech-developed sensors and hardware to prototype new product features
- Designing wired and wireless network communication protocols for embedded hardware
- Work directly with R&D personnel to develop and test sensor processing and machine learning algorithms
- Manage updates, bug-fixes, software testing, and Git repositories for new hardware and software releases
- Develop a strong technical understanding of NZTech products and how they are deployed
- Actively working with the team to brainstorm, discuss, and solve technical problems

MINIMUM JOB REQUIREMENTS:

The prospective candidate should have the following skills/experience:

- A university degree in Electrical/Computer Engineering, or Computer Science (or the like)
- Minimum 4 years of relevant experience in **embedded** software development
- Developing, deploying, and testing embedded applications
- Developing with wired (e.g. I2C, SPI, USB) and wireless (TCP/IP) communication protocols
- Integrating and processing sensor data in real-time embedded applications
- Comfortable using basic hand tools and working with embedded electronics
- Good programming skills with OOP languages such as C, C++, Python and automation scripting
- Collaborating via version control software (i.e. Git)
- Strong interpersonal communication and professional documentation skills
- Experience with sensor processing algorithms is an asset
- Knowledge of Network and Server-client infrastructures is an asset

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!

Please submit **both your resume and cover letter** to naomi@nztech.ca with the job title as the subject of the email. A portfolio would be an asset. We will contact you if we see a good fit between the candidate and the position.