

## Junior Software Engineer

*Garmin Stellenbosch*

### JOB DESCRIPTION

Garmin is looking for a talented Engineer or Computer Scientist to join our R&D team in Stellenbosch. If you are passionate about designing consumer products that can influence the lives of many thousands of people worldwide, this should excite you. At the Garmin Stellenbosch site, we focus on using **cutting-edge consumer Radar technology** in creative ways for consumer and fitness applications.

We are looking for a full time **Junior Software Engineer** in our **Stellenbosch** office. In this role you will be responsible for carrying out software development in C, C++, Assembly language or other selected languages for new products and applications.

### ESSENTIAL FUNCTIONS

- Design, implement and test software modules using C/Assembly language in an embedded environment
- Algorithm development using MATLAB/C#/C++/C
- Provide reliable solutions to a variety of problems using sound problem-solving techniques
- Ability to find technical root cause and corrective action for given problems
- Demonstrate ability to complete well defined moderately complex tasks and/or projects
- Participate in peer reviews in areas of software designs, algorithm designs and software development
- Contribute towards software requirements, software architectures and software test plans
- Offer process improvement suggestions
- Exemplify Garmin's Mission Statement and Quality Policy and proactively work to improve Garmin's image and culture
- May be required to travel to USA, Canada and Taiwan

### QUALIFICATIONS

- Bachelor's Degree in Engineering or Computer Science





## SKILLS

- Excellent communication skills and can comfortably communicate and collaborate with team members in USA, Canada, Taiwan and Europe (both verbal and writing skills)
- Familiar with Agile (Scrum) software development methodology
- Demonstrated ability to achieve goals while working in a fast-paced, collaborative team environment
- Demonstrated capability to perform code reviews for other Software Engineers
- Must possess proficiency in writing software in C/C++
- Must be able to execute software activities required to “turn on” a new microcontroller (set up development environment and software repository, obtain/write hardware drivers, implement communications protocols (e.g. USB, SPI, I2C, UART, Ethernet, BLE), implement a scheduler/RTOS) under general guidance
- Familiar with version control tools (e.g. Git) and the idea of Continuous Integration
- Able to use test/debug tools (e.g. logic analysers) to debug and decode protocols such as SPI, I2C, CAN
- Knowledge and experience with Radar signal processing and algorithm development is highly advantageous
- Ability to read PCB schematics, identify components and solder test points is highly advantageous
- Some PCB design experience is highly advantageous
- Experience with ARM processors is highly advantageous
- A personal passion for fitness, health and wellness

## APPLICATION INSTRUCTIONS

Solve a puzzle to apply! Using [this](#) audio data, can you estimate the speed of the car as it passes? Your approach, assumptions and coding excellence will be the most important factors being evaluated (exact numeric precision of the solution is of lower importance). E-mail your code and CV to [Nolan.VanHeerden@garmin.com](mailto:Nolan.VanHeerden@garmin.com) with the subject line “Garmin Challenge 2020 – \*\*\*km/h”, where \*\*\*km/h is your estimated speed.

Applications close on 25 November 2019 and applications submitted after this date will not be considered. Note that if you have not received a response within three weeks, please consider your application as unsuccessful. The target start date for this position is 1 January 2020. Preference will be given to EE candidates with the relevant qualifications, experience and skills.

