Radar Algorithm Engineer

Garmin Stellenbosch

April 2026

Key details

Summary:	Algorithm development for consumer radar products
Qualifications:	Bachelor's degree in Electronic Engineering or similar
Experience:	Junior (0-1 years) or intermediate (2-4 years) level in radar systems, signal processing or algorithm development
Location:	Stellenbosch, Western Cape, South Africa (in-person)
Starting date:	Flexible, from June 2026
Applications close:	Thursday, 30 April 2026
Employment Equity:	Preference will be given to candidates from the designated EE groups
More info:	www.garminpuzzle.co.za
To apply:	Solve our programming challenge, and then fill in this questionnaire

Who we are

Garmin Stellenbosch is the R&D team behind Garmin's award-winning consumer radar products:

- Varia Bike radars, such as the bestselling RTL515 and the brand new RearVue 820
- Golf launch monitors such as Approach R10 and Approach G82
- Ballistic chronographs such as the Xero C2
- Motorcycle blind spot monitors such as the Zumo R1

Our mission is to bring radar to life!

- We explore new low-cost radar technologies
- We create amazing new products that people use every day
- We take high-quality products through mass production and into the market

If you are excited about working on the next great radar product in an energetic team environment, then Garmin Stellenbosch is the place for you!

What you'll do

We are looking for a full time **Radar Algorithm Engineer**. In this role, you will contribute to algorithm development for new radar products and applications.

You will:

- Join a local radar software team that is part of an international multi-disciplinary product team
- Amaze the users of our radar products by developing algorithms in a MATLAB environment
- Develop tools to visualise radar data and evaluate the performance of the radar algorithms
- Present challenges and progress in the radar algorithm performance to the team for collaborative problem-solving
- Improve algorithm performance by refining the logic and optimising parameters
- Bring the magic into the real world by implementing algorithms in embedded C and C++
- Solve problems by applying sound techniques to identify the root cause and provide a reliable solution
- Help the team maintain a high standard of excellence in the team by participating in peer reviews of software designs, algorithms and source code

You may also:

- Help lay the foundation for a successful product by contributing to software requirements, architecture and detailed design (moved)
- Contribute to PC tools used to capture and visualise real-time data, using C# and Python
- Implement automated optimisation using techniques such as genetic algorithms
- Give input to the teams developing user interface as they decide how best to present the radar data to the end user
- Take part in exploration into new technologies
- Travel to Garmin's offices in the USA, Canada and Taiwan

What you'll need

The following skills will be essential for success in this role:

- Ability to solve programming problems with high-quality code
- Proficiency with programming and data visualisation/analysis using MATLAB, Python or similar languages
- Eagerness to learn and ability to self-start
- Excellent collaboration and communication skills, to operate successfully within a local and international development team
- Ability to work independently under general guidance

And the following skills and knowledge would be advantageous:

- Knowledge of the operation of CW and FMCW radars
- Signal processing techniques such as digital filters and FFTs
- Algorithms such as curve fitting and Kalman filters
- Proficiency writing software in C, C++ or C#
- Experience with embedded systems
- Version control tools (e.g. Git)
- Agile (Scrum) software development methodology
- Unit testing and Test Driven Development
- Experience with machine learning and computer vision

Apply now!

Does this excite you? Solve our programming challenge, and then fill in this questionnaire to apply!

If you have not received the result of your application within three weeks of applying, please consider your application to be unsuccessful. Garmin Stellenbosch reserves the right not to make an appointment for this position.

Applicants must possess a valid South African ID number. Preference will be given to Employment Equity candidates with the relevant qualifications, experience and skills.