

VACANCY – SOFTWARE DEVELOPER (SIGNAL PROCESSING)

Reutech Radar Systems is a radar development company located in Stellenbosch. We develop radar systems and subsystems for the defence, security and mining industries, both locally and internationally.

We are looking for a highly skilled Software Developer specialising in Signal Processing to join our engineering team and help drive the next generation of sensing technology.

In this role, you will play a critical part in designing, implementing, and optimising complex algorithms that turn raw data into actionable intelligence. If you are passionate about high-performance computing, real-time systems, and pushing the boundaries of what is possible in radar technology, we invite you to apply.

MAIN RESPONSIBILITIES:

- Assist in designing and implementing software for signal processing applications
- Support the development of low-latency network communication protocols
- Participate in system integration efforts across software, firmware, and hardware
- Maintain software baselines using version control systems

KEY GOALS:

- Integrate smoothly into the team and provide effective capacity and support to senior developers
- Grow technical capabilities in C++, signal processing, and radar system integration to support long-term succession planning
- Ensure the reliable delivery of assigned software modules and components to assist overall project timelines

INHERENT REQUIREMENTS:

EDUCATION & EXPERIENCE:

- Degree in Engineering, Computer Science, or Applied Mathematics
- 2 to 3 years of software engineering experience, or a strong academic background for entry-level candidates
- Full-time, on-site availability at the RRS offices in Stellenbosch

TECHNICAL STACK:

- Proficient in C++ for performance-critical applications
- Experience programming, scripting, and simulation skills using Python and MATLAB
- Understanding of memory management and system-level optimisation
- Understanding of high-speed TCP/UDP communications and network programming
- Working knowledge of modern source control systems

SPECIALISED KNOWLEDGE & ADVANTAGES:

- Exceptional strength in mathematics, particularly in areas relevant to digital signal processing
- Practical knowledge and application of system integration techniques
- Experience with parallel computing using NVIDIA CUDA is considered a big advantage, as we recognise this as a highly valued and scarce skill
- Previous experience or knowledge of radar signal processing is also considered a significant advantage

COMPETENCIES:

- Solid foundational understanding of software architecture, network programming, and version control
- Strong mathematical aptitude and a willingness to learn complex digital signal processing concepts
- Team-oriented mindset with the ability to adapt and learn quickly in a specialised, multi-disciplinary environment

CLOSING DATE: 17 April 2026 10h00

Should you be interested and meet the requirements, please submit your application to Clio Visser at cliov@reutechsystems.com or careers@reutech.co.za. If you do not receive any feedback within 2 weeks of submitting your application, please consider your application unsuccessful. The company has the right to cancel or amend the vacancy as advertised.