

# VACANCY – SENIOR 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 seeking a highly skilled Senior Software Developer specialising in Signal Processing to join our engineering team at Reutech Radar Systems. In this role, you will be at the forefront of innovation, designing and implementing sophisticated algorithms that define the performance of our world-class radar and sensing solutions.

From enhancing detection capabilities to optimising real-time data throughput, your expertise will directly contribute to the safety and success of our clients. If you are passionate about pushing the boundaries of radar technology and thrive in a collaborative, high-impact environment, we invite you to help us shape the future of signal intelligence.

## MAIN RESPONSIBILITIES:

- Design, implement, and optimise software for high-performance signal processing applications
- Develop, test, and maintain robust, low-latency network communication protocols using high-speed TCP/UDP
- Drive system integration efforts, ensuring seamless interaction between software modules, firmware, and hardware components
- Apply advanced memory management techniques to ensure the stability and efficiency of high-throughput applications
- Utilise version control systems to manage software baselines and ensure clean, collaborative code development.
- Apply advanced mathematical models to solve complex engineering and processing challenges

## KEY GOALS:

- Successfully bridge the gap between advanced mathematics and high-performance software execution
- Develop, optimise, and integrate complex signal processing algorithms effectively into the broader system
- Take ownership of projects from concept to completion, ensuring robust and efficient deployment within the multi-disciplinary team

## INHERENT REQUIREMENTS:

## EDUCATION & EXPERIENCE:

- Degree in Engineering, Computer Science, or Applied Mathematics. A Master's degree is highly preferred
- Minimum of 5 years of relevant industry experience in software engineering or signal processing
- Full-time, on-site availability at the RRS offices in Stellenbosch

## TECHNICAL STACK:

- Extremely proficient in C++ for performance-critical applications
- Solid programming, scripting, and simulation skills using Python and MATLAB
- Deep understanding of memory management and system-level optimisation
- Deep understanding of high-speed TCP/UDP communications and network programming
- Strong 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:

- Self-driven with a strong sense of ownership and the ability to take projects from concept to completion
- Highly adaptable, capable of working efficiently both independently and collaboratively within a specialised multi-disciplinary team

## 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](mailto:cliov@reutechsystems.com) or [careers@reutech.co.za](mailto: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.