

VACANCY SYSTEMS & SIGNAL ANALYST

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.

Reutech Radar Systems is seeking a motivated, passionate, and detail-oriented engineer or scientist to join our Technology Office as a Systems & Signal Analyst. This role is well suited to someone who enjoys solving complex technical problems, has a strong interest in real-world radar systems, and is eager to contribute to the development of advanced sensing technologies.

You will work with real radar systems and real radar data, applying modern signal processing techniques, state-of-the-art data processing and analytics, and system-level modelling to help shape the performance and architecture of our next-generation radar systems.

Main Responsibilities:

Core Technical Analysis

- Analyse complex radar system behaviour and signal processing chains using simulated and recorded data.
- Investigate advanced algorithms and system architectures in areas such as detection, tracking, data fusion, clutter rejection, and machine learning.
- Perform system-level modelling, trade studies, and performance evaluations in support of ongoing radar development programs.

Support During Development & Risk Mitigation

- Assist in the de-risking and maturation of new technologies through detailed investigation and simulation.
- Work closely with the Technology Office and engineering teams to answer key technical questions and shape solutions.

Early-Phase Concept Development

- Contribute to early-phase project and concept development, including proposal preparation, feasibility studies, and requirement formulation.

Field Trials & Cross-Functional Collaboration

- Support radar system field trials and evaluations by assisting with data collection, analysis, and reporting.
- Collaborate effectively across functional disciplines – including radar engineers, RF designers, signal processing developers, systems engineers, and project leads.

Minimum Requirements:

- BSc/BEng in Electronic Engineering, Computer Science (with engineering exposure), or Physics.
- 5+ years experience in radar, electronic warfare, or related signal and systems analysis domains.
- Proficiency in MATLAB and Python for simulation, data analysis, and algorithm prototyping.
- Demonstrated ability to evaluate or improve performance of complex signal processing systems.
- Must be able to work independently & integrate tightly with engineering and technical project teams.

Competencies:

- Passionate about radar systems, signals, and the technologies that enable high-performance sensing.
- A self-starter and finisher who enjoys solving complex problems with limited guidance.
- Flexible, curious, and capable of adapting to changing priorities or technical directions.
- Able to engage technically across a wide spectrum – from low-level signal models to high-level architectural evaluations.
- Comfortable operating in a fast-moving environment with multiple concurrent activities.
- Communicates clearly and works well with people across technical, operational, and project domains.

Closing date: 18 December 2025 10h00

Should you be interested and meet the requirements, please submit your application to Clio Visser at cliov@reutech.co.za or alternatively to 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.