

VACANCY

SENIOR SYSTEM ENGINEER

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 motivated and experienced Senior Systems Engineer to join our team at Reutech Radar Systems. The ideal candidate will need to have a deep understanding of systems engineering principles and practices, as well as experience with a variety of systems and technologies.

In this role, you will be responsible to provide technical leadership to the multi-disciplinary project team, to understand client requirements, manage the investigation, selection and implementation of selected solutions. You will also be responsible for the design, implementation, and maintenance of our complex systems. You will work closely with other engineers and professionals to ensure that our systems are reliable, secure, and efficient.

If you are a highly skilled and experienced Systems Engineer who is looking for a challenging and rewarding role, we encourage you to apply.

Key Goals & Responsibilities:

- Lead the systems engineering process for radar development projects from concept to delivery. This includes defining system requirements, developing system architectures, performing trade studies, and managing system interfaces.
- Apply advanced technologies and scientific principles to develop innovative radar solutions. This may involve working with other engineers to develop new radar algorithms, waveforms, or RF designs.
- Use modeling and simulation to assess system performance and identify potential risks. This may involve developing and using MATLAB, Python, or other software tools to create and analyze radar system models.
- Work with other engineering teams to integrate and test radar systems. This may involve developing test plans, executing tests, and analyzing test results.
- Support the certification of radar systems for use in commercial or military applications. This may involve working with government agencies to ensure that radar systems meet all applicable safety and performance standards.
- Interface with customers to understand their needs and requirements. This may involve participating in customer meetings, writing requirements documents, and providing technical presentations.
- Mentor and train junior engineers in the systems engineering discipline. This may involve providing technical guidance, reviewing work products, and leading team meetings.
- Developing concepts of operation for radar systems. This involves defining how the radar system will be used and how it will interact with other systems.

- Developing software requirements for radar systems. This involves defining the functionality and performance of the radar system software.
- Performing statistical and numerical analysis of radar performance data. This involves using statistical and numerical methods to identify trends and patterns in radar data.
- Developing analysis tools to support problem identification and resolution. This may involve developing MATLAB or Python scripts to automate radar system analysis tasks.
- Presenting findings and solutions to leadership and/or customers. This may involve giving technical presentations to customers, senior management, or other stakeholders.

Inherent Requirements:

- Minimum qualification: B.Eng (Electronic). M.Eng preferred.
- Minimum of 10 years' experience within the specific engineering discipline.

Competencies:

- Strong technical knowledge of radar systems and subsystems. This includes knowledge of radar signal processing, antenna design, waveform generation, and RF electronics.
- Experience with systems engineering principles and practices. This includes the ability to define system requirements, develop system architectures, and manage system interfaces.
- Strong analytical and problem-solving skills. This includes the ability to use modeling and simulation to assess system performance, identify potential risks, and develop solutions to complex problems.
- Excellent communication and presentation skills. This includes the ability to communicate complex technical concepts to a variety of audiences, including customers, senior management, and other engineers.
- Ability to work independently and as part of a team. Senior systems engineers often work on complex projects with multiple stakeholders, so it is important to be able to work effectively with others.

CLOSING DATE: 06 October 2023

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