



# Senior Engineer (Sonar Systems)



## Location

Chertsey/Portland

## Status

Permanent

## Hours

37.5

## Job Purpose

To work as part of our systems development team specialising in signal processing and numerical model development throughout the full engineering lifecycle. Supporting from research and studies through the development of high-performance system design such as sonar and communications / VLF and Sonar simulators. Specialising in complex system problem solving and developing engineering solutions.

**Reporting to: Project Manager**

## Candidate Requirements

- To develop and evaluate algorithms for detection, classification and localisation of contacts using underwater acoustic sensors.
- Communication VLF and any other area.
- Observe, predict scientific engineering and technological trends to continually improve the business offering.
- Provide a research and development capacity by conducting the studies and producing technical papers and reports.
- Present and publish results and work.
- Support the business team in preparing technical proposals and solutions.
- Interact with hardware, software, and firmware Engineering development teams to ensure that system design achieve the operational performance requirements.

## Essential Qualifications and Skills

- Required to have an in-depth knowledge and experience in digital signal processing, signal processing with statistical methods, sonar array signal processing, numerical methods and simulation of physical processes and use of digital filters.
- Experience in complex system design, implementation, test, and integration.
- Experience developing engineering-based computer models using high level programming languages such as MATLAB/Simulink.
- Expertise in algorithm development and front-end signal conditioning for analogue digitalisation.
- Able to provide technical leadership within project teams as a Design Authority.
- Ability to present complex ideas to internal and external stakeholders at all levels.
- Willingness to work as part of a collaborative enterprise with other companies including short period of detached duty on-board or at sea when required.



- Innovative and creative thinking to solve complex technical problems.
- Analogue design and pspace simulations.
- Experience of transducers and sensor interfacing.
- Participation in the full engineering system lifecycle from Requirement Capture, Design, Implementation, Test, Acceptance to Evaluation.
- Work as part of an Engineering Team coaching and mentoring less experienced engineers.
- Good interpersonal skills to liaise across Engineering Functions supporting system design meeting operation performance requirements.

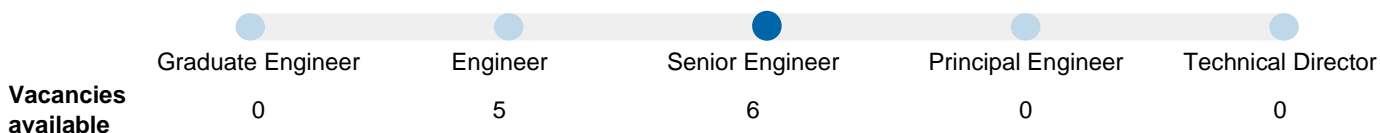
## Desirable Qualifications and Skills

- Previous experience in the field of underwater acoustics or similar.
- Communication System / VLF
- Experience of electronic hardware, software, or firmware design.
- Ability to work independently across site or as part of a multi-disciplined team.
- A knowledge of AI and machine learning would be advantageous.
- UK National.
- Ability to attain DV or SC UK security clearance.
- Full driving license.
- PhD/Degree level Physics, Math, or related Engineering Degree with a strong mathematical background.
- Member of a professional Engineering or Science Institute / Chartered Engineer.
- Sonar, communication system or mathematical modelling course (desirable)
- Ability to travel on occasions within the UK and Internationally.

## Salary:

Negotiable

## Vacancies Available within Function



**Contact**  
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**Please email your CV and covering letter to**  
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