



# CAMERA SYSTEMS TEAM LEADER

## ROLE SUMMARY

Hardware and software development of cutting-edge real-time imaging systems for the marine environment. This includes developing robust, production ready image processing and machine learning solutions

## KEY TASKS OF THE ROLE

### Principal accountabilities

- Responsible for setting the direction and goals for new and existing imaging and digital signal processing systems
- Leading the development of the complete camera system including Hardware, Firmware and Software
- Design, implement, evaluate, and deploy machine learning solutions for real-time application
- Applying engineering principles to provide technical solutions to exciting problems
- Maintain accurate documentation, records and produce timely reports
- Working within a quality management framework
- Supporting in-service queries from clients

## CRITERIA WHICH WILL BE USED IN SHORTLISTING AND SELECTING CANDIDATES

### Skills

- Good verbal and written communication skills
- Excellent problem solving and innovation skills
- Excellent IT skills
- Able to work on own initiative and prioritise effectively, achieving results against deadlines
- Ability to work collaboratively as part of a project team and by self
- Attention to detail with a high degree of accuracy
- Able and willing to learn new skills required to fulfil the role
- Ability to work flexibly to meet the needs of the company
- Excellent time management skills
- Able and willing to learn new skills required to fulfil the role
- Willingness to travel to other sites/events on occasion

### Desirable Knowledge

- Knowledge of adapting standard machine learning methods to best exploit modern parallel environments, GPU, OpenCL, OpenGL
- Knowledge of Firmware development on resource constrained microcontrollers

- Knowledge of commonly used protocols associated with communication interfaces (UARTs, USARTs, SPI, I2C, TCP/IP, UDP)
- Knowledge of signal processing and basic electronics principles
- Knowledge of the marine environment and ship-based operations
- Knowledge of Video and/or Thermal imaging systems
- Demonstrable knowledge of C++ standard library and the object-oriented, data structures, algorithms, problem solving, and complexity analysis
- Research or commercial experience in Machine Learning such as Deep Learning, SVM, MLP is desirable

### Experience

- Experience of Team Leadership
- Fluent in C/C++
- Commercial experience developing multithreaded applications
- Experience developing GUI applications with Qt
- Experience using opensource frameworks such as OpenCV, FFMpeg, Boost
- Proven skills in developing working, well-designed and testable software solutions
- Demonstrate ability to debug complex problems and a methodical approach to problem solving
- A demonstrable passion for technology and innovation
- 5+ years commercial experience developing with C and modern C++ 11/14

### Education & Certification

- MEng/MSc, equivalent or higher in an engineering, computer science or related science discipline
- Must drive due to location, client, and site visits

<b>CVs to be sent to</b>	<b>Kelly Holder: <a href="mailto:k.holder@seiche.com">k.holder@seiche.com</a></b>
Closing Date for CVs	22 January 2021
Location	Bradworthy, Devon, UK (Head Office), will consider remote UK location/working
Core hours	9am-5pm Monday to Friday with half an hour unpaid lunch break, Monday to Friday, with the occasional need to work overtime COVID-19 - working from home with occasional visits to the office Inter-company site visits potential (Post COVID-19)
Holiday and benefits	25 days holiday plus bank holidays pro-rata for part time employees
Salary	£35,000 - £40,000 (dependent on experience) plus overtime (by agreement)
Package	5 per cent employer contribution Life Assurance (4x Salary) Study/Training Support