



ENGINEERING
EXCELLENCE
UNDERWATER

JOB DESCRIPTION

Job Title – Control Software Engineer

Reporting To – Lead/Principal Control Software Engineer

COMPANY SUMMARY

Some would say we know more about space than our deepest oceans. At Soil Machine Dynamics we are helping to change this by designing and manufacturing world-leading remotely operated machines. Our technology is used for deep-sea intervention, exploration, cable and pipeline burial for wind farms, power, telecoms and oil and gas projects all over the world. Many of these machines are world firsts.

We are the World's leading independent supplier of this type of equipment and produce a variety of robotic systems for use by commercial, scientific and governmental organisations.

SMD is based in Newcastle-Upon-Tyne with all engineering disciplines under one roof including mechanical, hydraulic, electrical, electronic and software.

SMD offers lots of additional benefits to its employees such as hybrid working, private health care, matched pension contributions up to 6%, a rewards scheme to opt into additional benefits (Company car, private dental etc) and free morning and afternoon meals to socialise and interact with your work colleagues.

If you are the type of person who wants to make an impact on a company's and its performance then consider SMD, as the staff are the backbone of the company culture and at the forefront of SMD values of Respect & Honesty, A Passion for Excellence, Partnership and Safety.

JOB SUMMARY

The primary role will be to assist in the development, design and management of the control system software to enable the Company to stay ahead in the market through its standard product range but also special one-off vehicles. Involvement will be through the full product life cycle from initial sales/requirements to after services support.

The software team is very much a supplier to the rest of the business to help the company to continue to push boundaries in technology and meet customer requirements and new ways of working.

The role will report to the Lead or Principal Engineer to ensure the team objectives are aligned with the business goals going forward, and project requirements and delivery deadlines are achieved on time and to budget.

JOB DETAIL

Responsibilities

- Produce design documentation including functional design specifications, software design documents, test documentation etc.
- Develop, test and implement new software to fulfil the functional specification.
- Involvement in the full product life cycle, design through to commissioning and customer acceptance testing.
- Continuous development of product software capabilities and functions to maintain our market position in leading customer requirements.
- Adherence to all SMD QA processes.
- Potentially working away to help support customers or part of system development (1 – 4 times a year).

Technical Competences:

- At least 3 years of experience in software programming or capable of demonstrating relevant experience.
- Software design/experience in any of these areas:
 - C/C++ on Linux platforms (e.g.Ubuntu).
 - C# for Windows UI.
 - Python
 - Docker



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- Robotics middleware software (ROS)
- Mathworks Simulink
- QNX experience
- Unity experience
- Qt
- Microsoft Azure

Core Competences:

The individual must demonstrate the following:

- Customer focus.
- Highly performance-driven.
- Professional passion for quality.
- A pragmatic hands-on approach to problem-solving
- A positive and proactive approach.
- Flexible and the ability to multi-task and prioritise.
- Good team player.
- Good communication skills, both verbal and written.
- Ability to mentor engineers.
- Enthusiastic to learn new technology.
- Willingness to travel.

Additional Desirable Competencies:

- Understanding hydraulic schematics
- Understanding electrical schematics
- Understanding of electrical standards
- Mathworks Simulink
- SQL/MySQL experience
- HTML5
- Data analysis
- Image recognition
- Robotics
- Dynamic modelling
- Control theory

If you are hoping to join a great team and interested in the above role, please use our [CV submission link](#) on our website.