

## JOB DESCRIPTION

# **Software Engineer**

### **Overview (About us)**

From the seabed floor to the edge of space, we specialise in designing and producing custom battery packs to deliver state-of-the-art power solutions for harsh environments to the aerospace, defence, energy, medical, and industrial sectors and for autonomous, robotic, and subsea applications.

Custom Power products ensure that vital technology operates consistently, reliably, and above all safely, around the clock.

From the first day of your employment with us, you will be part of an organisation that strives every day to make your work rewarding and cares for your safety and wellbeing.

#### **Summary Details**

Job Type:	Hybrid
Job Title:	Software Engineer
Location:	Newcastle
Hours:	37.5 hours per week, Monday - Friday
Salary Package:	Competitive
Benefits	26 days holiday plus bank holidays, increasing to 29 days with long service  Discretionary Bonus once a year  Salary Sacrifice Pension  4 x Salary Death in Service payment  Access to Westfield Healthcare scheme, including:  • Corporate Healthcare Plan  • Employee Assistance program  • Wellbeing App  • Discount scheme  Cycle to Work Scheme  Eligible for enrolment in Employee Share Scheme after 12 months service.



#### The type of person we are looking for (About You)

The successful candidate will be a software engineer specialising in control systems.

The successful candidate will have the following skills:

- Development of embedded control systems
- C for embedded environments
- Algorithm development (such as State of Charge via coulomb counting)
- Simulation and modelling of battery systems
- Can produce clear documentation
- Understand and apply Software development standards and processes

#### The Role (What you'll be doing)

This role encompasses the following responsibilities:

- Working closely with others as part of a team developing a Battery Management System
- Office in Newcastle, may be required on site for testing in Crewkerne or Redditch
- Leading and supporting code reviews
- Develop and document coding practices
- Helping develop software specifications
- Working with teams in the UK and US

#### **Key Competencies**

The successful candidate will have the following experience:

- Minimum 4 years experience of BMS algorithm development using embedded C and/or SIMULINK
- Experienced at embedded software and firmware development
- Embedded communication protocols such as CAN bus, SPI and I2C
- Writing and verifying high reliability software
- C for embedded environments
- Familiar with C# for GUI development
- Familiar with peer review and version control systems such as BitBucket
- Experience with Battery Systems