



## DRIVING THE FUTURE OF ELECTRIC VEHICLES

**We are the world leader of in-wheel motors for passenger cars, light commercial vehicles and future transport solutions.**

Protean Electric is an automotive technology firm with over 150 talented people globally. Our mission is to drive sustainable transport through innovation, and we are the imagination behind vehicles that travel further, perform better and use fewer components.

We believe that freedom of ideas, integrity of response, desire to improve, and collaborative thinking drive innovation. Joining Protean means working with talented experts across the organisation who value your ideas, empower you to make a difference, and encourage you to challenge yourself and others.

## Software Engineer

Farnham, UK

### The Role

We are seeking the right individual to join our Software Engineering team.

### Main Duties & Responsibilities

The primary responsibility of this role is the development of firmware for Protean's in-wheel motors. This includes the development of requirements, modelling of the software design, implementation of firmware, and verification activities. As a member of the software team, the Software Engineer will be required to collaborate with other teams to meet the company's goals and targets.

### Reporting, Location & Travel

This role reports to the Software Manager and has no direct reports. The role is based in Farnham, Surrey with occasional requirement for national and international travel.

### Key Responsibilities

Responsibilities include, although are not limited to the following:

- Implement, test and review software source code in C
- Implement, test and review auto-coded software
- Create software architecture and unit designs in an AUTOSAR framework
- Develop and review software requirements with particular emphasis on functional safety
- Assist in the development of ISO 26262 compliant development processes
- Debug and root cause analysis of software issues

### Relevant Skills & Competencies

We welcome and encourage behaviours in line with our 'Values in Practice:

- **Will to Win:** we succeed by delivering to customers; on time, on quality and on cost
- **Pioneering:** we are passionate about the technology
- **Courageous:** we face our challenges
- **Working Together:** we can rely on each other and others can rely on us
- **Personally Responsible:** we do what needs doing, when it needs doing
- **With Integrity:** we are honest, open and respectful

Successful candidates should be able to demonstrate the following relevant skills and competencies:

- Development of embedded C working at the hardware/software interface level
- Development of embedded auto-code
- Ability to analyse and develop software requirements
- Excellent analytical skills for modelling structural and behavioural aspects of the software design
- Strong coordination, organisation and communication abilities
- Ability to present technical information
- Ability to self-motivate and work under pressure and time constraints with minimal oversight
- Problem solving skills

### Relevant Knowledge & Experience

Candidates should assess their suitability against the following essential and/or desirable relevant knowledge and experience:

#### Essential:

- Good technical degree in engineering or science
- Fluent in technical English
- Sound knowledge of embedded software development using the C language
- Experience in developing software requirements
- Understanding of architectural concepts
- Understanding of codes of conduct and ethical working

#### Desirable:

- Experience of software development in an AUTOSAR environment
- Proven experience of software design for embedded systems in industries such as Automotive, Aerospace, Industrial Control or Communications using a formal development process
- Familiarity with process-driven development, ideally ISO 26262, IEC 61508, DO-178B or similar safety standards
- Experience of SysML / UML
- Experience of software testing including Hardware-in-the-Loop and Unit Test
- Experience of electric motors and associated control systems
- Experience in auto-coding using tools such as Mathworks Embedded Coder or dSPACE TargetLink
- Knowledge of Automotive SPICE
- OEM/Tier 1 experience with software for vehicle ECUs
- Experience working with high power electric and hybrid powertrains
- Knowledge in scripting languages such as Python



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## Employee Benefits

In return for a rewarding and fulfilling career, all Employees can look forward to receiving a competitive salary, plus a number of additional employee benefits:

- **Core hours\***: we offer a flexible approach to working hours in the office, with core hours available to all Employees, requiring them to be in the office between 10:00 and 16:00 each day, from Monday to Friday. This provides Employees with the flexibility to start work, and finish work at a time that is convenient to them providing a little more freedom to take into account the journey to work and family commitments.
- **Performance Bonus**: Employees are eligible to receive a discretionary bonus of up to 15% of annual salary; this is paid annually and is subject to the company meeting its agreed performance targets.
- **Life Assurance**: Employees are automatically enrolled into the company's Life Assurance scheme; this provides the sum of four times annual basic salary in the event of death during employment.
- **Pension Scheme**: Employees are automatically enrolled into the Company's Group Personal Pension Scheme, with the company matching contributions from a minimum of 5% up to a maximum of 7%.
- **Private Healthcare**: subject to completion of probation, Employees, their partners and dependents, are able to join the company's private healthcare scheme with BUPA, in addition to an accompanying cash plan with BHSF.
- **Learning & Development**: Employees are encouraged to continue their career development with a variety of training courses and development opportunities available to them, including the offer of learning Mandarin\*.
- **Relocation**: we are able to offer a relocation package to assist Employees and their families when relocating to within a designated distance/duration from the company's offices.

Full details of the Employee Benefits are available upon request, or will be made available on provision of an offer of employment.

*(please note that the items marked with an asterisk \* are currently suspended as a result of the ongoing pandemic)*

Should you wish to apply for this role, please e-mail your CV, covering letter and salary expectations to: [ukjobs@proteanelectric.com](mailto:ukjobs@proteanelectric.com) – please be sure to **quote the full Job Title in the subject line** and read our Privacy Notice.

Thank you for your interest, we wish you every success with your application.

