



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 100 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.

Systems Engineer

Farnham, UK

The Role

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

Main Duties & Responsibilities

The primary responsibility of this role is the development of the Functional and Technical Safety Concept for Protean's in-wheel motors. This work focuses on modelling of the system design using Model Based Systems Engineering (MBSE) techniques, leading architecture trade-offs, defining/managing interface definitions, the development of hardware/software requirements and devising/monitoring verification campaigns. As a member of the Systems Engineering team, the Systems 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 Systems Engineering Manager and has no direct reports. The role is based in Farnham, Surrey with occasional requirement for national and international travel, primarily to China.

Key Responsibilities

Responsibilities include, although are not limited to the following:

- Stakeholder requirements analysis
- Functional analysis and development of system, hardware and software requirements
- Requirements baseline management, traceability and verification



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- Execution/coordination of analyses to confirm compliance to requirements
- Production of relevant safety work products including specifications and reports
- Support inductive and deductive Safety Analyses (including FMEA, FTA and DFA)
- Work with other engineering disciplines to develop robust technical solutions and maintain Architecture definitions and trade-off analysis
- Analyse test results, support change management and provide dispositions on non-compliances
- Contribute to risk assessment and contribute ideas to improve schedule and/or reduce cost

Relevant Skills & Behaviours

We value and measure ourselves against the following 'Best-Self' Behaviours:

- Pioneering
- Driven
- Tenacious
- Collaborative
- High Integrity
- Responsible

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

- Excellent interpersonal skills
- A good communicator
- Strong problem solving skills
- Attention to detail
- Drive for continuous improvement
- Successfully present technical information
- Ability to self-motivate and work under pressure and time constraints with minimal oversight

Relevant Knowledge & Experience

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

Essential:

- Proven experience of systems design for embedded systems in industries such as Automotive, Aerospace, industrial control or Communications
- Familiarity with ISO 26262, IEC 61508, DO-178B or similar safety standards
- Deriving, analysing and managing requirements
- Defining and developing systems architectures and performing trade-offs
- Able to work as part of a multi-function team
- Successfully presents technical information

Desirable:

- Experience of SysML and Model Based Systems Engineering methodologies
- Familiarity with Sparx Systems Enterprise Architect, IBM Rhapsody or similar UML/SysML tool
- Familiarity with APIS and Isograph Reliability Workbench FT+
- Knowledge of Matlab and Simulink
- System verification and testing experience
- Experience of hardware and software development for safety related systems
- Familiarity with Automotive SPICE or similar process model
- Experience of electric motors and the associated control systems
- Automotive OEM/Tier 1 experience
- Experience working with high power electric and hybrid powertrains



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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, 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.
- **Discretionary Bonus:** Employees are eligible to receive a discretionary bonus of up to 15% of annual salary; this is paid annually and is subject to meeting set agreed 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.

Should you wish to apply for this role, please e-mail your CV, covering letter and salary expectations to: 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.

