



## **Power Systems Engineer**

At Potential Motors, we have a passion for improving safety and the environment through innovation in the electric mobility sector. We are an early-stage company creating innovative technology to improve safety in hazardous conditions. We are doing this by creating a software drivetrain with new capabilities in AI control to allow our vehicle to perform maneuvers no person would be capable of.

We are looking for an innovative Power Systems Engineer to join our team and be responsible for both the design and implementation of the electronics used in an electric vehicle. In this role, you'll be working in a fast-paced environment with a combination of hands-on and design work. This work will involve testing, debugging, and proposing solutions to complex problems. You will be at the centre of the iterative design process and will be involved in a broad range of responsibilities including:

- Work cross-functionally with mechanical, and software teams to design and develop a model-based design of power systems and electronics for the powertrain of the vehicle.
- Complete technical ownership of power electronic systems from specification through design, prototype, validation, and manufacturing stages.
- Develop test stands and processes to integrate new subsystems with simulated and actual vehicle components

### **What we're looking for :**

- BS degree in Electrical Engineering, specialization in power systems is a plus
- Experience working on the development of complex electro-mechanical projects.
- Experience with HV traction systems, both in terms of design, and hands-on type work
- Strong understanding of power electronics topologies (AC/DC, DC/DC & DC/AC)
- Strong understanding of electric vehicle architectures
- Solid understanding of the theory and application of magnetics (inductors, transformers) and capacitors (Electrolytic, film, and ceramic) used for power conversion

- Experience testing motor and traction systems
- Formula SAE Electric experience is a major plus.
- Experience with Simulink and Maplesim is a plus
- Hands-on technical experience debugging complex systems involving networked microprocessors and software-controlled electrical or electromechanical devices
- Proven ability to use programming to solve challenging problems and increase their own/team's efficiency through automation
- Experience with CAN and Vector CAN tools is a plus
- Experience with Failure Mode and Effects Analysis (FMEA) and Hazard Analysis and Risk Assessment (HARA) is a plus
- Experience in the automotive industry isn't required but is a plus

### **Why work with us?**

- You will have independence and the opportunity to have a real impact - your voice will be heard
- Lots of opportunity hands-on work
- You will work with something real - you will see your work driving!
- Lots of room to grow with the company, in position, and in learning
- Freedom and flexibility in work-life balance
- A values-driven workplace and strong founding culture
- Unlimited vacation
- Health benefits

Does this sound like you? Would you like to learn more about this exciting career opportunity with our innovative startup team? Please get in touch - we'd love to hear from you! Or if this sounds just like someone you know, please share this job posting.

We thank all who apply, however only those most closely matching these requirements will be contacted for an interview