Position Description

Position Title: Controls Engineer
Department: Engineering
Location: Escondido, CA
Job Code: 16A031
Full/Part-Time: Full-Time
Regular/Temporary: Regular

Transportation Power is a leader in the development of cutting edge, advanced medium and heavy duty electric vehicles (EV’s), hybrid-electric vehicles (HEV’s) and grid energy storage applications. Its advanced technology outperforms competing systems for the most demanding heavy-duty vehicles, including the largest Class 8 on-road trucks, yard tractors, port cargo handling vehicles, and school buses.

Transportation Power offers competitive compensation, excellent benefits, including a 401K with employer match, and professional development opportunities. This is an exciting opportunity to work with a highly skilled, interdisciplinary team that is passionate about innovating to develop conversion technologies to improve efficiency, reduce fossil fuel consumption and improve the environment. To learn more about Transportation Power, visit our website at http://www.transpowerusa.com/

Job Description:

This job will have the candidate rotating between the production floor, TransPower vehicles, and an office environment, and thus requires a person who enjoys that diversity. The position will require some travel to support vehicles deployed at customer locations. This is a fast-paced company providing a challenging environment where new products are always in development and open ended problem solving is the norm. TransPower is small, but growing, so candidates must be self-directed, multitasking, and able to function within various levels of structure and supervision.

Minimum Qualifications:

- A Bachelor’s degree or higher in the field of Mechanical/Electrical Engineering and 2-5 years of experience
- Experience in Model-Based Controls Development – Controls Rapid Prototyping and Development
- Strong knowledge of Matlab Simulink based control and plant models development methodology and Matlab scripting
- Experience in closed loop testing of control models at various fidelity such as MIL, SIL and HIL
• Troubleshooting experience with tools such as oscilloscopes, multi meters, Vector CANalyzer, and general problem solving skills
• A strong understanding of vehicle sensors and associated I/O interface Experience with CAN connected devices and knowledge of CAN communication protocol (J1939)
• Ability to communicate effectively across disciplines and work levels
• Data analytical skills in programs such as Excel and Matlab
• Component specification, testing, calibration, and operational validation as it applies to advanced vehicles and power solutions

Desired Qualifications:

• Experience in development of control systems and specifications for purposes of automotive energy management, emissions management, and increased operational safety or performance
• Experience in commissioning and calibration of vehicle systems, including control algorithms or other software systems
• Must possess a strong understanding of vehicle electrical design and schematic layout, with focus on retrofitting conventional vehicles with advanced alternatively fueled powertrains
• Experience with high voltage DC bus design
• Component specification, testing, calibration, and operational validation as it applies to advanced vehicles and power solutions

Areas of Responsibility:

• Use MotoHawk Model-based tool chain for controls development
• Develop and test advanced automotive products such as proprietary battery management systems and automated manual transmissions
• Work with advanced vehicle powertrain design and integration
• Work on medium and heavy duty vehicle platforms
• Be able to program embedded components when required (C++…)
• Update electrical schematics with Microsoft Visio

How to Apply:

Reference Job ID#16A031. Submit resume and cover letter as one document to recruiting@transpowerusa.com.

Transportation Power is an Equal Opportunity Employer. Employment is based on business needs, merit, performance and competence. We do not discriminate on the basis of race, color, religion, marital status, age, national origin, ancestry, physical or mental disability, medical condition, pregnancy, genetic information, gender, sexual orientation, gender identity or expression, veteran status, or any other status protected by law.