JOB POSTING

Electrical Design Engineer

Smartville is a rapid-growing renewable energy company located in sunny Carlsbad, CA. Battery Electrical Design Engineer at Smartville will work on developing, prototyping and production of battery energy storage systems.

Responsibilities

• Design, prototype, test, implement, and service unique battery control algorithm that works with complex power converter system, BMS and battery system assemblies.
• Specify, design and develop the battery pack architecture to meet application requirements and use-case scenarios.
• Experience with high voltage high power system safety requirements.
• Testing – develop comprehensive test specifications, support design verification (DV) and production validation (PV) testing for electrical, mechanical and thermal systems.
• Integration – Oversee and coordinate commercial product integration, site specific installation and operation.
• BMS - Familiarly with typical BMS system functionality, operation, and integration issues.
• Proposal development - Ability to write clear proposals with scope, deliverables, assumptions clearly defined.

Requirements

• Electrical system integration experience and knowledge of high voltage DC systems
• Wire harness design / 3D routing
• Digital and analog circuit design and PCB layout
• Firmware development
• Power electronics integration
• Experience with control implementation on real-time operating system (RTOS).
• Experience with communication protocols (i.e. UART, SPI, CANbus) and their development environments.
• Knowledge of scripting (Python, MATLAB, Unix, etc.) for control system implementation.
• Experience with mechanical and electrical CAD
• Understanding of electronics packaging design
• Familiarity with battery pack design, assembly, and functions
• Familiarity with methods of battery manufacturing and assembly
• Familiarity with firmware and Battery Management Systems

Contact
Antoni (Shijie) Tong
Email: Antoni Tong antoni@smartville.io
Mobile: (530) 304-5193