SR. ELECTRICAL AND SYSTEMS ENGINEER

Company Overview:

Prytime Medical Devices, Inc. (The REBOA Company™) is an innovative medical device company that designs, develops, and commercializes minimally invasive solutions for hemorrhage control. Our flagship product is the ER-REBOA™ Catheter. Prytime Medical's technical office, based in Lakewood, CO, is seeking a Senior Electrical and Systems Engineer to add to our positive, energetic, and collaborative team of engineers and technicians. The individual who will thrive in this position is a self-motivated critical thinker who enjoys the fast pace and accountability of a small company and wants to be a part of a team that takes high value ideas from concept to commercialization.

Job Summary:

This position will report to the VP of Engineering and be responsible for the following:
- Design, document, test, iterate, commercialize and support single/multi-use electronic and electro-mechanical medical devices (Devices will include open loop, semi-closed loop, and closed loop feedback systems)
- Create, modify and maintain software, firmware, and hardware (Working knowledge of microcontroller based systems: architecture, software development, synthesis, analysis, problem solving, troubleshooting and testing of embedded software and hardware)
- Generate engineering models and drawings
- Assemble prototypes, iterate design, and support manufacturing
- Create, execute, document and validate test methods
- Establish compliance with electronic medical device standards
- Provide engineering support for the manufacturing of products
- Create/maintain a project budget
- Write/review technical reports
- Create/maintain specifications

Primary Job Requirements:

- BS, MS or PhD in electrical engineering
- Minimum 10 years hands-on design and development experience with electronic devices
- Experience taking at least one medical device from concept to commercialization
- Experience designing, fabricating, and testing PCBAs
- Testing and validation of electronic systems
- Strong engineering fundamentals (mechanics, dynamics, electrical, fluids, etc)
- Competent working under Quality Systems, FDA and ISO regulations
- Electrical design software experience
- Strong experience with Design of Experiments and statistical techniques
- Project management experience
- Excellent ability to multi-task between projects
- Experience with creating, documenting and supporting intellectual property (IP)
- Excellent interpersonal/communication skills
- Confident taking initiative
- Ability to share knowledge in a team setting
- Ability to travel up to ~15%

Secondary Job Requirements:

- Experience designing electronic medical devices, catheters preferred
- Understanding of clinical and regulatory pathways, IP and internal processes
- Knowledge of basic human anatomy
- Knowledge of clinical settings such as in vivo labs and hospital operating rooms

Desired Skills and Experience:

Software Engineering:
- Communication Protocol Stacks: Bluetooth, BTLE, 3G, Wi-Fi, Mesh Networks, ANT, Gazelle, LTEM, SigFox, Proprietary protocols
- Embedded microprocessor and microcontroller software development
- Operating Systems: iOS, Android, Windows CE, Windows XP embedded, Windows, Embedded Linux, iOS, RTXC, IRMX, BSP, etc.
- TCP/IP wireless and Ethernet networking
- IIC, Serial and SPI Driver and implementations
- DSP algorithm and software development
- Simulations utilizing Matlab, Mathcad, Zemax, Mathematica, Labview
- Algorithm identification and integration

Electrical Engineering:
- Safety critical systems engineering, redundancy, FMEA, etc.
- Digital signal processing
- PCB design / Functional prototype / rapid PCB
- Application specific integrated circuits
- Analog and digital design / simulation
- Spice modeling and simulation
- Broad array of microprocessor experience: CISC, RISC, DSP, PIC, PSoC, TI MSP430, TI AM35 5X, Motorola HC05/12/16, 56000DSP, ARM Family single and multi-core,

Regulatory and agency testing and support
- UL, MECA, CSA, ETL
- EMC / FCC Testing
- IEC 60601-1, IEC 61010, EMC, EMI