

# **Software Engineer US Operations**

Location: Blackhawk Rd. Rockford, IL Department: Engineering Reporting To: Hours: 7:30am - 4pm

#### **JOB DESCRIPTION:**

The Software Engineer reports to the Director, Electrified Products. The primary focus of this position is embedded software design for automatic temperature controls used in Bergstrom's HVAC and chiller systems. This position works with other engineers to develop controllers to meet the customers' needs for climate control. In addition to software design for embedded systems, this engineer needs to be familiar with hardware design, software validation, and integration.

# **ESSENTIAL FUNCTIONS:**

- Responsible for identifying special characteristics in the design of products.
- Interface with suppliers and customers to establish clearly defined requirements.
- As a part-time resident engineer, you will provide excellent customer support and coordinate the issue resolution between the customer and Bergstrom development team to ensure that the customer can rely on our system and expertise.
- Design and specify the electrical and electronic system architecture of the HVAC and chiller systems
- Software test validation
- Create control system requirements, software specifications, and software architecture for Bergstrom controllers
- Implement software requirements using Matlab Simulink and auto-coding or C-code
- Issue software release for software to meet project timing
- Prioritize and plan activities to meet project target dates
- Perform customer failure analysis, identify root cause, document, and implement corrective action(s)
- Participate in engineering and general design reviews as required

# **OTHER REQUIRED SKILLS AND ABILITIES:**

- Experience with compressors used in HVAC and chiller systems
- Embedded software design of control systems, C and Matlab Simulink
- Familiar with: UDS diagnostics, CAN and LIN bus and AUTOSAR
- Experience with ECU design hardware and software for HVAC and chiller
- Process oriented and knowledge of DFMEA
- Experience with hardware circuit design or circuit analysis
- Experience with software validation using dSPACE HIL system
- Basic knowledge of air-conditioning and chilling systems

# **EDUCATION AND/OR EXPERIENCE:**

- Bachelor's Degree in Electrical and Electronic Engineering or equivalent
- 3 years of working experience in Electronics/Software Design

#### **PAY AND BENEFITS:**

- The budgeted range for this role is \$80,000 USD \$95,000 USD per year. The salary range
  provided is a good faith estimate representative of the desired level of experience for the
  position. Bergstrom Inc. considers several factors when extending an offer, including but not
  limited to, the role, function and associated responsibilities, a candidate's work experience,
  education/training, and key skills.
- Hired applicants may be eligible for benefits, including but not limited to, Bergstrom's discretionary incentive, medical, dental, vision, life insurance, short-term disability, long-term disability, 401(k) match, flexible spending accounts, employee assistance program, tuition reimbursement, paid time off and holidays.

#### **TO APPLY:**

If you would like to be considered and meet all the position requirements, please <u>email</u> your resume and cover letter to Andrew Hall in Human Resources.

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