

# **ROBOTICS/AUTOMATION ENGINEER**

## **JOB DESCRIPTION**

### **POSITION SUMMARY**

The Robotics/Automation Engineer will lead and explore novel human factors design to simplify surgical procedures in interventional cardiology. This position is a key contributing R&D team member with potential for growth. The successful candidate must be a subject-matter expert of and will be responsible for hands-on prototyping of control systems consisting of sensory interfaces and feedback controls through automation and software development. The candidate will work collaboratively with R&D team members to drive product, regulatory, and clinical development.

### **ESSENTIAL DUTIES AND RESPONSIBILITIES**

The essential functions include, but are not limited to the following:

- Initiate novel concept design based on user experience and usability
- Design and prototype miniature sensory and feedback control system development with ROS (Robot Operating System) and/or RTOS
- Develop, organize and lead hardware design review
- Collaborate with software team to conduct code reviews of control systems software.
- Be directly involved preclinical and clinical development to obtain relevant physician feedback on user experience and usability for iterative design improvements
- Plan, develop and manage test fixtures and systems for performance verification & validation and manufacturing engineering

### **MINIMUM QUALIFICATIONS (KNOWLEDGE, SKILLS, AND ABILITIES)**

- Minimum Bachelor's degree in Robotics, Computer Science, Mechatronics, Aeronautical, Electrical or Computer Engineering, with a preference for Master's or PhD.
- Minimum of 5-10 years of related experience in control systems development, including sensory feedback, automation and/or robotics
- Experienced with programming languages such as Python, C, and C++
- Familiarity with machine learning or deep learning a plus
- Other skills:
  - Advanced problem-solving, organizational, analytical and critical thinking skills, with strict attention to detail
  - Ability to work on unusually complex technical problems and provide solutions which are highly innovative and creative, compare and evaluate possible courses of action after considering various possibilities, and make decisions in the face of different alternatives and without formulas or guidelines, or with guidelines that are not complete and exhaustive
  - Ability to develop expertise or recognized as an expert in a technical area, and maintain technical know-how, looking ahead to identify technical gaps and taking action to address them
  - Ability to work independently and meet development schedule without close supervision; work is generally self-guided with adherence to established patterns and practices
  - Ability to translate complex and technical information to all levels of the organizations, communicate and recommend course of action after considering potential risks of alternatives

- Excellent documentation and communication skills and interpersonal relationship skills including negotiating and relationship management skills
- Ability to interact professionally at all organizational levels
- Ability to manage competing priorities in a fast-paced environment
- Acceptance to be overseen by managers and more senior team members
- Ability and willingness to supervise others in resolving complex issues in specialized area based on existing solutions and procedures
- Ability to provide guidance for the successful completion of major programs and may function in a project leadership role