

## **SOFTWARE ENGINEER – RESEARCH**

**POSITION SUMMARY:** Develops and supports software for the Scientific Research department (i.e., psychophysics experiment scripts, clinical and analysis software applications) primarily in MATLAB.

### **ESSENTIAL DUTIES AND RESPONSIBILITIES:**

- Develops and supports software for the Scientific Research department (i.e., psychophysics experiment scripts, clinical and analysis software applications).
- Contributes at all levels of the software development cycle including architecture, detailed design, implementation, and testing (unit, integration and system)
- Documents architecture and detailed design, and testing plan of software systems.
- Works directly with internal and external stakeholders to gather project requirements.
- Analyzes software requirements to determine feasibility of design within time and cost constraints.
- Adheres to high quality coding and testing practices: coding conventions, static code analysis, unit/integration testing, re-factoring and code reviews
- Supports Systems R&D department on cross-departmental software projects.
- Works with end users such as Field Clinical Engineers, scientists, and clinicians concerning maintenance and enhancement of clinical and analysis software as well as patient data handling.
- Learns and adopts the evolving improvements in the software engineering field.

### **EDUCATION/CERTIFICATION:**

- Bachelor's degree in Computer Science or other scientific or engineering discipline from four-year college or university
- 0-3 years related experience and/or training

### **EXPERIENCE REQUIRED:**

- Experience developing MATLAB GUI applications
- Experience with medical device software or software development in scientific research environment strongly preferred

### **KNOWLEDGE REQUIRED:**

- Knowledge of object-oriented analysis and design including common design patterns and UML.
- GUI design, validation, verification and documentation.

### **KNOWLEDGE PREFERRED:**

- Development of customer-facing software
- JavaScript
- Swing based Java stand-alone applications Linux/Unix, C/C++, High level scripting languages (e.g. Python Ruby), Postgres SQL
- Knowledge of HIPAA regulations and compliance

**SKILLS/ABILITIES:**

- Excellent people skills, team oriented. Ability to motivate teams toward meeting goals.
- Effective written and verbal communication skills
- Detail-oriented with strong organizational skills
- Effective problem-solving skills.
- Ability to work under time and resource pressures
- Good personal presentation