

## **Ideal Positions for Tamara Blain**

### **Trimble Navigation Product Application Engineer**

The product application engineer is responsible for articulating the requirements for the software interface from the Product Manager to the Engineering team within an Agile development environment. The product application engineer will work in a collaborative product marketing team that is tasked with identifying the "system" level needs as well as the detailed functional software requirements. Specific duties include: • Articulation of software level requirements from marketing to engineering for development. • Acts as a key team member of the marketing team that provides input and challenges assumptions regarding requirements and user stories. • Identify any additional challenges that the software solution might bring and collaborate with the marketing team on solutions to addressing those challenges. • Work closely with the R&D team in brain storming on how to address the requirements in the implementation stage of realizing the requirements The successful candidate will be a strong leader and communicator in a quickly growing team.

### **Computer Programmer**

#### **Massachusetts General Hospital Clinical Neurotechnology Research Assistant**

The Clinical Neurotechnology Research Assistant's primary responsibility is the performance of clinical neurotechnology research clinical trial participants with tetraplegia (quadriplegia). These responsibilities include the careful execution and documentation of research sessions studying the safety and efficacy of investigational medical devices and novel, neurally-controlled assistive interfaces (brain-computer interfaces) for people with paralysis or communication impairments.

#### **PRINCIPAL DUTIES AND RESPONSIBILITIES:**

- Install complex research computing hardware and software
- Maintain computer software which involves tracking all software updates and testing equipment function after such updates.
- Maintain computer hardware by confirming that all cable connections are intact and functioning, troubleshooting equipment components in a manner consistent with safe use of the system, understanding the relationship between hardware components, and anticipating and eliminating hurdles to system expansion and changes (which occur regularly).
- Arrange, schedule, and execute twice-to-four-times-weekly research sessions, including regular interaction with persons with paralysis and their families/caregivers.
- Record neural activity, selects appropriate neural waveforms, configures custom software, and document Neural Interface System performance.
- Record HD video of research sessions.
- Back up and archive data daily to RAID servers
- Perform simple troubleshooting of computer software and hardware
- Help to evaluate user interfaces and neurally-controlled assistive devices for persons with paralysis
- Provide vigilant skin care of neurosurgically-placed devices
- Teach participants' caregivers how to properly clean and care for the skin around the percutaneous device interface.
- Assemble unique systems to perform new, unusual or special tests
- Maintain inventory control for supplies and equipment to assure proper inventory levels
- Conduct a broad range of experiments involving advanced technology; contribute to the design of experimental protocols to achieve the scientific objectives of the research project

- ¿ Works closely with Supervisor and with colleagues at other universities
- ¿ Communicate to manufacturers about problems with medical devices; ensure appropriate response
- ¿ Assists other neurotechnology research projects, as assigned by Supervisor
- ¿ Functions as the principal technical specialist for the research unit or for a specific research project
- ¿ Attends weekly lab meetings (in person or by videoconference); present data.
- ¿ Enhances Web presence for research
- ¿ Assists in preparation of reports for regulatory bodies (e.g., Institutional Review Boards, FDA).
- ¿ Other duties as assigned

## **QUALCOMM**

### **Computational Neuroscience Software Engineer**

Do you ever wonder why animals can do simple things well when the best machines can't? Are you interested in how the brain works? Do you believe that technological advances can be made through the analysis of biological systems? If the answer is yes, then this might be the job for you. We are looking for an innovative person, versed in neuroscience and software development, that will join a team striving to discover the next revolution in computing technology.

The assignment will challenge you, the position is demanding and fast paced, but you will be rewarded with the opportunity to change the world. The candidate must be confident in their strengths, pragmatic, and must have strong communication, teamwork, engineering, neuroscience, and software development skills.

Corporate R&D's mission is to create tomorrow's technology and this position is at the forefront.

### **Positions within think tanks**