MCEH Internship @ your company name

<table>
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<tr>
<th>Internship title</th>
<th>Hand Dexterity Rehabilitation Internship</th>
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<td>Reports to</td>
<td>Jing Xu, Assistant Research Scientist, MCEH</td>
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**Internship purpose**

The goal of the Developing and Piloting Therapies for Hand Dexterity Rehabilitation project is prototyping and piloting hand function assessment and therapies in stroke patients, using a hand device that records forces produced by each finger, in preparation for a large-scale clinical trial for hand rehabilitation post-stroke.

The intern will work with and learn from senior neuroscientists, engineers, clinicians, and therapists through hands-on experience in developing and testing effective rehabilitation devices and therapies. They will learn skills in the following aspects: 1) analytical and critical thinking skills through identifying problems in the hardware, software, neuroscientific questions, and patients' needs, 2) problem solving skills through designing and running experiments, collecting and analyzing data, and suggesting solutions, 3) inter-personal skills through interacting with a large inter-disciplinary team to achieve the ultimate research goals.

**Duties and responsibilities**

- Assist with design and implementation of behavioral experiments on hand function, using a force-sensing hand device
- Recruit and test healthy participants and stroke patients, using the hand device and other neurological exams
- Assist with data analyses, and hardware design and maintenance
- Create a poster and present the results of the internship at the Johns Hopkins Research Symposium on Engineering in Healthcare, Nov 2019

**Qualifications**

- Bachelor's degree in related field: Biomedical Engineering, Neurology, Neuroscience, Computer Science, Experimental and Cognitive Psychology. Some experience in research, medical devices, and patients preferred.
- Strong analytical/problem solving skills
- Technical experience in qualitative data collection and performing statistical analysis
- Technical experience with sensor technology is preferred but not required

**Working conditions and physical requirements**

Indoor- shared office environment
Possible exposure to clinical setting (observing workflow)
Ability to physically operate computer

**Compensation**

$14-15 per hour, depending on qualifications and for up to 40hrs per week.
**Anticipated Start Date**

Jun 3rd, 2019

**Duration**

Summer, 2019
Possibility for extended internship, if there is interest on both sides

**Location**

Johns Hopkins East Baltimore Campus, Carnegie Building, Baltimore, MD

**Application Process**

Email your resume and one paragraph describing what you are looking to gain from this internship to Vess Vassileva-Clarke: vclarke@jhu.edu. Please include contact information (name, email address and/or telephone #) for your academic adviser. Use Subject line “MCEH Hand Dexterity Rehabilitation Internship- Summer 2019” for your email.

Applications received on or before May 30, 2019 will be given first consideration.