PhD Position on the detection of hand movement dynamics

We offer a PhD position in which the candidate will develop a system for computer-assisted diagnosis of motor disorders based on the recognition of characteristic differences of hand movement dynamics. Data will be acquired from healthy subjects and patients using suitable motion sensors. The candidate will be involved in a wide range of the development process, including reading the sensor data, implementing a software for recording well-controlled hand gestures, developing algorithms to reliably discriminate hand dynamics of different motor disorders and evaluate the system with a group of patients and controls. A main focus will be algorithm development, which requires expertise in machine learning and statistical learning, with the special challenge to deal with dynamically varying input signals. The position holder will be embedded in a vibrant local network of neuroscientists at the Faculty of Medicine and the Science Campus Magdeburg, and will participate in the Otto-von-Guericke Graduate Academy.

Your profile:

- MSc in computer science, electrical engineering, medical engineering or related area
- interest signal processing, machine learning and neuroscience
- statistical knowledge and programming experience (required: C++/C# or Java, Matlab or Python)
- fluent in English
- reliable, flexible, passionate

Project start: September, 15th
Project duration: 3 years

Please submit your application (CV, Transcript of Records, abstract of Master Thesis, names of two referees) to elena.azanon@ovgu.de or christoph.reichert@lin-magdeburg.de. Applications will be accepted until position is filled.