The CITEC offers a full-time research position starting as soon as possible (E13 TV-L, non-permanent position)

Your Tasks
The NeuroInformatics Group (Prof. Dr. Helge Ritter) at the Faculty of Technology, Bielefeld University, is looking for a PhD candidate with a research focus on "Machine Learning/Deep Learning" in the area of multi-modal control of prosthetic hands. In the DeepHand project, that is carried out together with the German Aerospace Center, DFKI Bremen, and the University of Siegen, we aim for controlling a five-fingered hand prosthesis measuring residual muscle activity in the forearm by means of various sensors (classic EMG, tactile, electrical impedance tomography, as well as ultrasound).

The tasks include in particular:
- development of suitable machine learning algorithms to map the sensor data to hand motions. A particular challenge will be the non-stationary data distribution due to hysteresis, temperature fluctuations, slipping of the sensors and other external disturbances. (90 %)
- participation in the preparation, implementation and evaluation of experiments for data acquisition (10 %)

Your Profile
We expect
- scientific degree (master or diploma) with outstanding results in computer science or engineering with special focus on machine learning or a related subject
- excellent knowledge and experience in the field of "Deep Learning", especially unsupervised learning and RNNs
- excellent programming skills in Python as well as TensorFlow/Keras
- very good English skills (written and spoken)
- good command of German (or the willingness to learn this)
- independent, self-reliant and dedicated style of work
- strong organizational and communication skills
- ability to cooperate and to work in a team

Remuneration
Salary will be paid according to Remuneration level 13 of the Wage Agreement for Public Service in the Federal States (TV-L). As stipulated in § 2 (1) sentence 1 of the WissZeitVG (fixed-term employment), the contract will end after 24 months. In accordance with the provisions of the WissZeitVG and the Agreement on Satisfactory Conditions of Employment, the length of contract may differ in individual cases. The employment is designed to encourage further academic qualification. In principle, these full-time position may be changed into a part-time position, as long as this does not conflict with official needs.

Bielefeld University is particularly committed to equal opportunities and the career development of its employees. It offers attractive internal and external training and further training programmes. Employees have the opportunity to use a variety of health, counselling, and prevention programmes. Bielefeld University places great importance on a work-family balance for all its employees.

Application Procedure
For full consideration, your application should be received via either post (see postal address below) or email (a single PDF) document sent to rhaschke@techfak.uni-bielefeld.de by February 19th, 2020. Please mark your application with the identification code: wiss20015. Please do not use application portfolios and send only photocopies of original documents because all application materials will be destroyed at the end of the selection procedure. Further information on Bielefeld University can be found on our homepage at www.uni-bielefeld.de. Please note that the possibility of privacy breaches and unauthorized access by third parties cannot be excluded when communicating via unencrypted e-mail. Information on the processing of personal data is available at https://www.uni-bielefeld.de/Universitaet/Aktuelles/Stellenausschreibungen/2019_DS-Hinweise_englisch.pdf.

Postal Address
Universität Bielefeld
CITEC
Herrn Dr. Robert Haschke
P.O. Box: 10 01 31
33501 Bielefeld
Germany

Contact
Name: Dr. Robert Haschke
Phone: +49 521 106-12122
Email: rhaschke@techfak.uni-bielefeld.de