Research position
starting soon as possible
(E13 TV-L, non-permanent position)

Main responsibilities

The advertised vacancy is located within the Neuromorphic Behavior Systems Group of the Faculty of Technology and the Cluster of Excellence Cognitive Interaction Technology (CITEC). Within the scope of this position, experimental brain-inspired computation and neuromorphic sensing and actuating will be carried out. The position advertised here can be filled with either a PostDoc or a doctoral student.

Successful candidates are expected to:

- research (80 %):
  - research on computer simulations as well as design and characterization of neuromorphic circuits in analog VLSI hardware
  - development of theories, methods and tools for constructing compact low-power bio-mimetic systems which are able to solve real-world problems but not approachable with portable conventional devices
  - publication of project results and presentations at national and international conferences
  - assistance with the acquisition of third party funding (in case of PostDoc)
  - teaching (20 %):
    - assistance with teaching and supervision of Bachelor’s and Master’s projects

Applicant’s Profile

We degree

- degree in computer sciences, engineering, electrical engineering, physics, mathematics, neurosciences or related disciplines
- experience in analog VLSI design
- very good knowledge in the fields of neural networks and computational neuroscience
- very good programming knowledge and proficiency in the development of algorithms in Python or C++ and knowledge of the relevant frameworks, e. g. Brain2, SpiNNaker, pyNN
- fluent written and oral communication skills in English

Preferable qualifications

- PhD in computer sciences, engineering, electrical engineering, physics, mathematics, neurosciences or related disciplines
- knowledge of event-based information processing
- experience with neuromorphic hardware
- knowledge of Linux-based IT environments
- interest in the design and development of ASoSI circuits and bio-inspired systems for information processing
- self-driven, goal-oriented and systematic approach to new topics
- high degree of commitment and initiative as well as being able to work closely and communicate effectively with a diverse group of scientists and technical staff
- willingness to participate in international and interdisciplinary collaborations
- fluent written and oral communication skills in German

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) of the WissZeitVG (fixed-term employment), the contract will end after a period of three years (postdoc position) or rather 1 year orientation phase with the option to extend for two further years (doctoral). 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, the full-time positions may be changed into part-time positions, as long as this does not conflict with official needs.

Bielefeld University is particularly committed to the career development and equal opportunities of its employees. It offers attractive internal and external training and further teaching 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.

Master’s degree in computer sciences, engineering, electrical engineering, physics, mathematics, neurosciences or related disciplines

We expect

- self-driven, goal-oriented and systematic approach to new topics
- high degree of commitment and initiative as well as being able to work closely and communicate effectively with a diverse group of scientists and technical staff
- willingness to participate in international and interdisciplinary collaborations
- fluent written and oral communication skills in German

Applicant´s Profile

We degree

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Application

For full consideration, your application should be received via either post or email (a single PDF document) sent to chicca@cit-ec.uni-bielefeld.de by the 18th of December 2017. The application should include a cover letter, a meaningful description of your research area (topics and methods), a research statement covering personal research interests, planned research goals and how they fit into the research carried out in the Neuromorphic Behavior Systems group, a CV outlining prior education, research experience, skills and publications, two letters of reference and academic transcripts (bachelor and master/diploma and PhD). Please mark your application with the identification code wiss17322. Please do not use application portfolios and only photocopies of original documents because all application materials will be destroyed at the end of the selection procedure. Further information about Bielefeld University can be found on our homepage at www.uni- bielefeld.de.

Contact

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Email: chicca@cit-ec.uni-bielefeld.de

Bielefeld University has received a number of awards for its achievements in the provision of equal opportunity and has been recognized as a family friendly university. The University welcomes applications from women. This is particularly true with regard both to academic and technical posts as well as positions in Information Technology and Trades and Craft. Applications are handled according to the principles of equal opportunity. In view of the large number of applications, we especially welcome applications from suitably qualified handicapped and severely handicapped persons. Applications from suitably qualified handicapped and severely handicapped persons are explicitly encouraged.

www.uni-bielefeld.de