JOB OFFER

Position in the project:	Junior post-doctoral researcher
Scientific discipline:	**Psychological sciences**
Job type (employment contract/stipend):	Employment contract
Number of job offers:	**1**
Remuneration:	≈ 8 000 PLN monthly (gross income)
Position starts on:	**1 July 2020**
Maximum period of contract/stipend agreement:	**24 months**
Institution:	Jagiellonian University, Cracow
Project leader:	Jacek Tabor
Project title:	**Bio-inspired artificial neural networks** *Project is carried out within the TEAM-NET programme of the Foundation for Polish Science*
Project description:	The aim of the project is to analyze high-level behaviors of biological neural systems and to build innovative artificial models by proposing new paradigms of learning and new architectures of computational models. The Jagiellonian University will run six research groups: Cognitive group, Physics-group, Machine-learning group, Neuro-group, BioDataScience-group, InfoTech-group. **We seek for junior post-doctoral researcher in Cognitive group, specializing in the EEG research** The broad aim of the group would be to acquire the fMRI, EEG, neurological, psychological, and behavioral data of patients diagnosed with multiple sclerosis (MS) and healthy

	The goal is to prepare the data for the further stage of analyzes carried out by other groups acting within project as well as conducting own analyzes allowing to determine the typology of changes in the restructuring of neural networks in patients and healthy subjects during the process of learning. Moreover, the relationship between mental exhaustion and resting state brain activity in MS patients and healthy subjects will be estimated. Additional goal would be to evaluate dynamic network reorganization during the process of learning, based on the EEG data.
Key responsibilities include:	1. Planning and conducting experiments using **dense-array EEG system**, including collecting the resting-state and task-related data 2. Dense-array EEG data processing and analysis, including the analysis of resting-state data and learning-related changes in neural activity. 3. Data pre-processing in order to create bio-inspired neural networks. 4. Manuscript preparation 5. Dissemination of the obtained result during the international conferences
Profile of candidates/requirements:	1. PhD diploma in psychology obtained no later than 5 years before the June 1st, 2020 2. Expertise in the EEG data acquisition, using dense-array EEG system (preferably 256-channel EGI Geodesic system). 3. Expertise in designing EEG procedures and research protocols 4. Extensive knowledge and working experience in **advanced EEG data analysis** (proven by track record of scientific papers, participation in the research grants, and participation in the data analysis workshops), 5. Proven experience in **programming in Matlab environment**. 6. Fluency in both written and spoken Polish and English is a must. 7. International research internships would be an advantage. Moreover, successful candidate should: - have an ability to work independently as well as within the team of researchers with various scientific backgrounds - have an ability to evaluate and, if needed, adjust the subsequent steps of the ongoing experiments - be willing to supervise the work of students involved in the project – **teaching experience would be an advantage**.
Required documents:	1. Application 2. Curriculum vitae. 3. Documents proving experience and background 4. Statement of knowledge and acceptance of intellectual property rules and legal protection. 5. Information about processing of personal data.

	6. Personal questionnaire. The recruitment committee reserves the right to conduct an interview with selected candidates
We offer:	1. Cooperation with the best computational neuroscience and machine learning groups in Poland 2. competitive earnings (about PLN 8,000 gross income, gross income together with the employer's costs for full-time equals 10 000 PLN) 3. dedicated funds supporting participation in meetings, scientific exchanges and other forms of doctoral training 4. access to computing infrastructure.
Please submit the documents to:	**wziks.projekty@uj.edu.pl**
Application deadline:	13 January 2020
General rules of the requirement process	1. Candidates may apply simultaneously to multiple positions offered by the project. This must be declared in the application form. 2. Selection decision will be taken by the Recruitment Committee (RC) on 23th January 2020 3. Selected candidates will be invited to an interview between 20 - 22 January 2020. 4. RC's decision will be announced on 23th of January The final decision must be approved by the Foundation for Polish Science. 5. RC reserves the right to close the competition without selecting a candidate. 6. In case of resignation of a recommended candidate or failure to receive the Foundation for Polish Science's approval, RC may invite further candidates or may announce a new call for the position.
For more details about the position please visit	bionn.matinf.uj.edu.pl
Euraxess job/stipend offer (in case of PhD and postdoc positions):	Junior Postdoc (EURAXESS Job Offer id: 472302)

Due to the entry into force of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016, we also require that by applying, a candidate expresses his/her consent to the processing of his/her personal data needed for the recruitment process by the Jagiellonian University.