JOB OFFER

Position in the project:	Research Junior
Scientific discipline:	Psychological sciences/Neurobiology
Job type:	Employment contract
Number of job offers:	1
Remuneration:	≈ 8 000 PLN monthly (gross income) doctoral degree obtained up to 5 years from the date of employment in project, full-time (gross income together with the employer's costs for full-time equals 10 000 PLN)
Position starts on:	**1st** October 2022
Maximum period of contract:	7 months
Institution:	Jagiellonian University, Cracow
Project leader:	Jacek Tabor
Project title:	Bio-inspired neural networks
Project description:	Artificial neural network model was created basing on analogies to biological counterparts, such as a simplified model of the neuron or a system of retinal neurons. Due to the increasing complexity of tasks and problems with the development of effective methods for learning deep neural networks, solutions based on algebraic structures dominate Today, advanced approaches in machine learning such as deep learning shows number of undesirable features, such as forgetfulness, susceptibility to adversarial examples, the requirement for a large training set, and slow learning. Most of these features do not occur in biological systems, thus it would be beneficial to take an inspiration from them to help training artificial systems. 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 Research Junior in Cognitive group
The broad aim of the group would be to acquire the resting state fMRI, neurological, psychological, and behavioral data of 160 patients diagnosed with multiple sclerosis (MS) during two sessions regarding their psychophysiological state and 80 healthy controls. As a result, data from 320 individual scans of patients in various stages of MS disease and 80 controls will be collected. In particular, 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. 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 performing a task with the use of electroencephalography.

Key responsibilities include:	1. Conducting fMRI data analysis in close cooperation with interdisciplinary team. 2. Interaction with neurological patients. 3. fMRI data, processing, and analysis (nonlinear method of analysis is highly desirable). 4. Preparing data for artificial intelligence to make a model of restructured networks in patients' brains. 5. Manuscripts preparation. 6. Presentation of scientific data on international conferences.
Profile of candidate:	We are looking for a motivated candidate with PhD in psychology and/or neurobiology: 1. PhD degree (the dissertation topic in the field of fMRI analysis is highly desirable). 2. Practical experience in fMRI data analysis (nonlinear method of analysis is highly desirable). 3. Publications at leading scientific journals. 4. Programming experience or knowledge of Matlab. 5. Experience in work with patients with neurological and psychiatric diseases. 6. Experience in interdyscyplinary and international cooperation.

	7. A good command of English and Polish (both in writing and speaking). 8. Full engagement in the project.
Required documents:	1. Curriculum vitae 2. Documents proven profile of candidate experience (points from 1 to 7). 3. Statement of knowledge and acceptance of intellectual property rules and legal protection. 4. Information about processing of personal data 5. Personal questionnaire. 6. Opinion from current scientific supervisor. 7. declaration of the candidate, confirming that the Jagiellonian University will be their primary place of work, should they be selected in the competitive selection process 8. declaration under Article 113 of the Law on Higher Education and Science 9. declaration on acknowledging and accepting the rules and regulations concerning intellectual property management and commercialisation in force at the Jagiellonian University
We offer:	1. Full time employment from 1 October 2022 till 30 April 2023 (7 months), subject to periodical evaluation. 2. Scientific and organizational support. 3. Work in an interdisciplinary research team.
Please submit the documents to:	wziks.projekty@uj.edu.pl
Application deadline:	10th September 2022 (12 PM CEST)
General rules of the recruitment	1. Candidates may run simultaneously for all positions offered by the project. This must be declared in the application form. 2. The decision will be taken by the Recruitment Committee (RC) established at the Faculty of Management & Social Communication of the Jagiellonian University to 15th September 2022 3. The final decision must be approved by Foundation for Polish Science 4. An interview is expected. RC reserves the right to invite for the interview only pre-selected candidates. 5. We expect that the interview will be held on 12 September 2022. 6. The confirmation will be sent to the prospect candidates on 11 September 2022.

	7. RC reserves the right to close the competition without selecting the candidate.
	8. In the case of the resignation of a candidate recommended for the position of a Research Junior, or failure to receive the Foundation for Polish Science's approval,
	9. RC will be evaluating the candidates, or may ask to publish a new call for the position.
	10. The results of the recruitment procedure may be appealed by the candidates within the period of one week after obtaining information about the decision RC.
Declaration forms can be obtained at	http://www.cso.uj.edu.pl/-nauczyciele
For more details about the position please visit:	bionn.matinf.uj.edu.pl
Euraxess job/stipend offer:	https://euraxess.ec.europa.eu/jobs/824523

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.

Information on Personal Data Processing

for a candidate

Pursuant to Article 13 of the Regulation of the European Parliament and of the Council (EU) 2016/679 of 27 April 2016 on the protection of individuals with regard to the processing of personal data and on the free movement of such data and repealing Directive 95/46/EC (General Data Protection Regulation, hereinafter: GDPR), the Jagiellonian University informs that:

1.   The Controller of your personal data is the Jagiellonian University, with a registered seat at ul. Gołębia 24, 31-007 Kraków, represented by the JU Rector.

2.   The Jagiellonian University has appointed a Data Protection Officer, www.iod.uj.edu.pl, with a registered seat at ul. Gołębia 24, 31-007 Krakow. The Officer can be contacted via email: iod@uj.edu.pl by phone at 12 663 12 25.

3.   Your personal data will be made available for the purposes of:

a.   conducting the procedure of recruitment for the position of assistant professor in the research staff at the Institute Applied Psychology in compliance with the legal obligation to which the Controller is subject pursuant to Article 6.1(c) of the GDPR, in connection to the Act: Labour Code.

b.   conducting the procedure of recruitment for the position of assistant professor in the research staff at the Institute of Journalism, Media, and Social Communication pursuant to the expression of consent pursuant to Article 6.1(a) of the GDPR: your consent is your express action in the form of sending your CV to the Controller. The consent to have your personal data processed pertains to the data you voluntarily provide in the submitted CV, which do not stem from the provisions of the Act: The Labour Code.

4.   The obligation for you to provide your personal data stems from the provisions of law (applies to the personal data processed pursuant to Article 6.1(c) of the GDPR). Failure to provide personal data precludes participation in the recruitment procedure. Providing the personal data processed pursuant to the consent (Article 6.1(a) of the GDPR) is voluntary.

5.   Your data shall be processed over the course of the recruitment process. If a contract is not concluded with you, your data will be deleted once the recruitment process has ended.

6.   You have the right to: access the data and demand their rectification, deletion, processing restrictions, transfer the data, object to the processing of data on terms stipulated in the GDPR.

7.   If the processing is conducted by consent, you have the right to withdraw your consent at any time with no consequences for the compliance with the right to processing of the processing done by consent before the withdrawal. The withdrawal of the consent to have your data processed can be emailed to wziks.dziekanat@uj.edu.pl or sent by regular mail to the address: ul. Łojasiewicza 4, 30-348 Kraków, room 0.207 or communicated in person at the Dean's Office, Faculty of Management and Social Communication (address as above).

8.   Your personal data will not be subject to automated decision making or profiling.

9.   You have the right to lodge a complaint with the President of the Office for Personal Data Protection, should you ascertain that the processing of your personal data violates the provisions of the GDPR.

Date and signature