

JOB OFFER

IN THE SCIENTIFIC PROJECT

executed also in AGH University of
Science and Technology under
the leadership of dr hab. Adrian Horzyk



In the project: *Development of effective mechanisms for robot perception using motivated learning and self-organizing associative memory.*

Name of entity: University of Information Technology and Management in Rzeszow, Poland, Faculty of Applied Informatics, Department of Applied Information Systems

Job Title: **Ph.D. student**

Requirements:

- Degree: Master of technical sciences in computer science or a related field,
- Knowledge of artificial associative systems and memory modeling,
- Knowledge of methods of knowledge engineering and databases,
- Knowledge of techniques of computational intelligence,
- Knowledge of image recognition and classification,
- Experience in the techniques of computer modeling,
- Knowledge of languages and tools such as C #, C / C ++, Matlab,
- Very good knowledge of English both spoken and written,
- Proven research achievements through publications and research awards
- The ability to present the results of scientific research,
- Conscientiousness, accuracy, very good organization skills,
- Interpersonal skills, communication and teamwork ability.

Description of tasks:

The person hired will participate in the implementation of the following tasks:

- The generalization of associative neural mechanisms for modeling knowledge and memory for any spatiotemporal patterns,
- Development of new mechanisms of inference based on associative memory model and active data representation,
- Construction and testing of an associative neural system capable of representing any learning patterns and associate them contextually with each other,
- Creation of new mechanisms of self-organization of semantic memory, which in cooperation with episodic memory will allow for contextual representation of the activities done in the virtual and real worlds,

- Consolidation of semantic and episodic memories with motivational factors in order to generalize the motivated learning methods,
- Describing research results and preparation of scientific publications.

Type contest NCN: OPUS – ST

Deadline for submission of tenders: 30 April 2017 23:59

Form for submission of tenders: freely

Conditions of employment:

The hired person will participate in a project implemented by the Department of Applied Information Systems under the guidance of prof. dr Janusz Starzyk, project director.

The research will also be carried out in Krakow in the Department of Automatics and Biomedical Engineering at the AGH University of Science and Technology under the direction of dr hab. Adrian Horzyk, the major contributor.

- **Compensation for up to 33 months of 3000 PLN gross/month.**
- Employment in the form of a scholarship at full-time.
- The scholarship may be suspended in case of not carrying out research tasks within the project or violations of professional ethics.
- In the period of remuneration, the student will not be able to draw other compensation in any form from the NCN.

Additional information:

Form for submission of tenders: Please send your application to the e-mail address of the project director (starzykj@gmail.com).

The contest will be decided by 15 May 2017.

The recruitment procedure is based on the provisions of the "Rules of granting scholarships for young scientists in research projects" Section 1-15 (Annex to the resolution of the Council NCN50 / 2013 of 3 June 2013).

Expected start date: June 1, 2017.

Registration for the contest should include:

- A cover letter with the reasons for interest in the project
- Curriculum Vitae of the candidate which provides information on current scientific achievements and research awards.
- Opinion of at least one researcher.
- Certificate of participation in doctoral studies,
- Declaration of consent to the processing of personal data content: I agree to process my personal data included in my job application for the needs of the recruitment process (in accordance with the Law on Personal Data Protection Acts. Laws 2002 No. 101, item. 926, as amended.)

If you are interested in this job offer do not hesitate to ask me for any further details and contact me by e-mail: horzyk@agh.edu.pl