

Jagiellonian University in Kraków promotes cooperation and cares for a good atmosphere based on mutual trust. It implements the strategy resulting from The Human Resources Strategy for Researchers, creating stable conditions for employment as well as the development of academic career, which resulted in the award of the HR Excellence in Research by the European Commission

INFORMATION ON SELECTION PROCEDURE

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| Date of selection procedure announcement | Kraków, 20.10.2023 |
| Selection procedure information number given by the Centre for Human Resources | 1227.1101.308.2023 |
| Dean of the faculty of /Director of a non-faculty, inter-faculty or common unit | prof. dr hab. Włodzimierz Zwonek Dean of the Faculty of Mathematics and Computer Science |
| Address | st. Prof. S. Łojasiewicza 6, 30-348 Krakow |

RECTOR

of the Jagiellonian University

announces a selection procedure for the position of an

ASSISTANT PROFESSOR

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| Group of employees JU organisational unit) | Research staff Faculty of Mathematics and Computer Science |
| Field of science | Natural sciences |
| Discipline | Computer Science |
| Scope | Constraint Satisfaction Problems over infinite domains |
| Number of posts | 1 |
| Type of employment | Temporary contract |
| Working time | Full-time |
| Planned duration of employment | 12 months with possible extension for another 12 months |

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| Expected date of employment commencement | 4th quarter 2023 |
| Remuneration | according to the Rules for Remunerating Jagiellonian University Employees |
| Requirements | <p>The selection procedure is open for all individuals, who meet the requirements set out in Articles 113 and 116.2.3) of the Act of 20 July 2018 – Law on Higher Education and Science, and who meet the following eligibility criteria according to § 165 of the Statute of the Jagiellonian University:</p> <ul style="list-style-type: none"> • holding at least a doctoral degree; • having relevant scientific achievements; • taking active part in scientific life. |
| Additional requirements and expectations | <ul style="list-style-type: none"> • According to the rules of the Weave-Unisono competition, this position can be filled by a person who received a doctoral degree in the year of employment in the project or within 7 years before January 1 of the year of employment in the project; • Ph.D. in Mathematics, Computer Science or related field. |
| Project Title | <p>Program: Weave-Unisono, NCN</p> <p>Project: Constraint Satisfaction Problems: beyond the finite case</p> |
| Project description | <p>An instance of the Constraint Satisfaction Problem (CSP) consists of two parts. The one part defines variables which may, for example, correspond to tasks to be scheduled. The second part contains local restrictions on these variables, saying, for instance, that certain tasks must take certain amount of time or must be performed after other tasks are completed. The question in the CSP is whether there exists a global assignment to the variables, such that all the restrictions, usually called constraints, are satisfied. In our running example a satisfying assignment defines an order of performing the tasks.</p> <p>On the theoretical side, the formalism of CSPs generalizes the Boolean satisfiability problem. The Boolean satisfiability, in turn, defines the most important open question in theoretical computer science, a Millennium Prize Problem of the Clay Mathematics Institute: does NP equal P?</p> <p>When constraints are modelled as relations over a finite domain, the CSP is always in NP. However, depending on the allowed set of relations, the CSP might be NP-complete (i.e., practically unsolvable by known algorithm) or in P (i.e., “efficiently” solvable). This “dichotomy” is obtained using, so called, algebraic approach to the CSP. The algebraic approach is a direction of research based on a deep connection between two involved mathematical theories: universal algebra and computational complexity.</p> <p>Unfortunately, even the simplest scheduling problem requires considering relations over an infinite domain. The aim of this project is to make a next step beyond the finite-domain CSP and consider a larger class of problems, including some infinite-domain CSPs. The problems that can be modelled in such an extended framework involve scheduling, but also problems in spatial and temporal reasoning and many other areas. The class of problems is extended and thus the theories must follow suit: the new research builds on computational complexity, universal algebra, and this time model theory as well as Ramsey theory.</p> |
| Scope of duties | <p>According to the Work Regulations of the Jagiellonian University Annex 1 to the Work Regulations of the Jagiellonian University – Model scopes of responsibilities and duties of academic teachers</p> <p>The exact scope of the duties, within the framework of the project, will be determined in cooperation with the candidate.</p> |

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| We offer | <ul style="list-style-type: none"> • stable employment based on an employment contract at the renowned university, • cooperation with the interdisciplinary academic community represented by well-known scientists, • scientific support as well as the possibility of qualifications improvement and professional development, • access to research infrastructure, • benefits in the form of i.a. Multisport card, sports activities, medical packages, group insurance, • additional social benefits. |
| Required application documents | <ol style="list-style-type: none"> 1. resume, 2. personal questionnaire filled in by the candidate, 3. copy of the master's diploma or a doctoral diploma, if applicable, 4. information on the candidate's scientific, teaching and organisational achievements, 5. declaration of the candidate, confirming that the Jagiellonian University will be their primary place of work, should they be selected in the selection procedure, 6. statement under Article 113 of the Law on higher education and science, 7. statement on acknowledging and accepting the rules and regulations concerning intellectual property management and commercialisation in force at the Jagiellonian University. <p>Declaration forms (no. 5-7) and personal questionnaire template (no. 2) can be obtained at: https://cso.uj.edu.pl/en_GB/konkursy</p> |
| The course of selection procedure | The first stage of the selection procedure is the formal assessment of the submitted documents. Applications which meet all formal requirements are the subject of substantive assessment, during which an interview with the Candidate may be conducted (directly or via electronic communication channels), upon settling the date of the interview with the Candidate. The Candidate has the right to appeal against the negative assessment by the selection board within 7 days from receiving the information about the results of the assessment. |
| Form of submission | by e-mail to the address: weave-unisono.call@matinf.uj.edu.pl title: Postdoc Weave-Unisono |
| Deadline for submission of applications | 03.11.2023 |
| Expected date of the selection procedure settlement | by 04.12.2023 |
| Method of communicating of the results of the selection procedure | by e-mail |
| Questions | For further information please contact dr hab. Marcin Kozik, prof. UJ e-mail address: marcin.kozik@uj.edu.pl |

In the selection procedure, the Jagiellonian University follows the principles of the European Charter for Researchers and a Code of Conduct for the Recruitment of Researchers.
Jagiellonian University does not provide housing.

On behalf of
the Rector of the Jagiellonian University
Dean of the Mathematics and Computer Science
prof. dr hab. Włodzimierz Zwonek

Personal data processing information for job applicants

According to Article 13 of the Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons 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 Administrator of your personal data is the Jagiellonian University with its registered office in Gołębia 24, 31-007 Kraków, represented by the Rector of UJ.
2. The Jagiellonian University appointed the Data Protection Officer www.iod.uj.edu.pl, Gołębia 24, 30-007 Kraków. The Officer can be contacted by email: iod@uj.edu.pl or at the telephone number 12 663 12 25.
3. Your personal data will be processed in order to:
 - a. conduct recruitment process for the position specified in this job advertisement – as part of the legal obligation of the Administrator pursuant to Art. 6 (1) lit c of the GDPR in connection with the Polish Labour Code;
 - b. conduct recruitment process for the position specified in this job advertisement based on your consent pursuant to Art. 6 (1) lit a of the GDPR – your consent is granted by the clear action of submitting your CV with the Administrator. The consent to the processing of personal data concerns data that you voluntarily provide as part of your CV, which do not result from Polish Labour Code.
4. The obligation to provide your personal data results from the law (it applies to personal data processed under Article 6 (1) lit c of the GDPR). Failure to provide you personal data will result in your inability to take part in the recruitment process. Submission of personal data processed on the basis of consent (Article 6 (1) lit a of the GDPR) is voluntary.
5. Your data will be processed during the recruitment period. In the event of not concluding the contract with you, your data will be deleted after the recruitment process.
6. You have the right of access to the content of your personal data, as well as the right to correct, delete, restrict processing, transfer, object to processing – on the terms and conditions set out in the GDPR.
7. If the processing is based on consent, you have the right to withdraw the consent at any time, which shall not affect the lawfulness of processing based on the consent given before the withdrawal. Withdrawal of consent to the processing of personal data can be sent by e-mail to: weave-unisono.call@matinf.uj.edu.pl or by post to the following address: **Wydział Matematyki i Informatyki UJ, ul. Prof. S. Łojasiewicza 6, 30-348 Kraków** or you can withdraw your consent in person at: **Wydział Matematyki i Informatyki UJ, ul. Prof. S. Łojasiewicza 6, 30-348 Kraków**.
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 Inspector General for the Protection of Personal Data, if you feel that the processing of your personal data violates the GDPR regulations.