

Assistant professor in the group of research and teaching staff, Institute of Mathematics

Lodz University of Technology is one of the finest universities of technology in Poland. Its tradition and experience in training professionals and conducting research date back more than 75 years. It is an attractive partner for business. It cooperates with the largest national and international corporations. It conducts research of a European standard, develops new technologies and creates innovation in collaboration with the leading research centres all over the world. One of the pillars of Lodz University of Technology management is equal treatment of staff regardless of their gender, age, race or other demographic and social characteristics. In 2016, TUL was the first technical university in Poland to receive the HR EXCELLENCE IN RESEARCH award certifying that the University adheres to the principles of *the European Charter for Researchers* and *the Code of Conduct for the Recruitment of Researchers*.

1. The requirements to be met by the candidate (detailed description of the knowledge, qualifications, skills, and professional experience):

- at least the Doctor of Philosophy degree in the discipline of mathematics;
- scientific achievements documented by publications in journals from the former list A of the Ministry of Science and Higher Education or the current list of the Ministry of Science and Higher Education with a score of 70 points or more;
- knowledge of sufficient topics related to the following fields of mathematics and computer sciences: machine learning (main clustering algorithms, basic techniques of regression and classification, basics of neural networks), and statistical data analysis (preprocessing, hypothesis verification methods, multidimensional data analysis);
- at least intermediate level of knowledge of the R programming language with dplyr library and selected visualization methods (e.g. ggplot2);
- at least intermediate level of knowledge of the Python programming language and basics of its main libraries for data processing and analysis: numpy, scipy, scikit-learn, pandas, matplotlib;
- knowledge of the Excel spreadsheet and any data base query language (e.g. SQL);
- knowledge of selected Big Data technologies is an additional advantage;
- knowledge of basics of constructions of statistical models, sufficient statistics, factorization criterion, theory of point estimation (unbiased estimation, consistent estimation, the Rao-Blackwell theorem, least square method, maximum likelihood estimation), theory of hypothesis verification (uniformly most powerful tests, invariant tests);
- teaching experience in conducting classes at a university;
- the ability to independently prepare scientific publications and prepare scientific reports;
- documented participation in realization of research projects;
- experience in conducting laboratory classes in the field of data analysis;
- experience in speaking at national and international conferences;
- knowledge of the Polish language at a level that allows conducting classes;
- knowledge of the English language at a level not lower than C1;
- the ability to publicly present the results of scientific work.

2. Specification of the terms and conditions of employment and authority associated with the

position:

- full time;
- expected start date of employment: October 1, 2023;
- the selected Candidate will be employed for a period of 24 months (until September 30, 2025);
- stationary work;
- powers related to the position held:
 - the possibility of developing a scientific career;
 - research trips to European research centers;
 - participation in national and international conferences;
 - publishing scientific papers in journals with a high Impact Factor.

3. Description of the expected responsibilities and duties:

- conducting scientific research;
- teaching classes;
- preparation of research proposals financed from Polish public funds (NCN, NCBiR, NFGWiOŚ, FNP) and/or EU funds;
- very good organization and independence as well as strong motivation to work;
- openness to new concepts, ease of learning;
- readiness to devote oneself to scientific work;
- high interpersonal skills, allowing for effective teamwork;
- accuracy in performing the entrusted tasks and ease in adapting to procedures;
- high communication skills.
- conducting scientific research in the field of mathematics (including: preparation of scientific publications and presentations at national and international conferences);
- conducting classes in the fields of study run by the Institute of Mathematics (lectures, exercises and laboratories, including data analysis);
- participation in research projects carried out at the Institute of Mathematics and applying for grants financed by external institutions;
- participation in organizational work for the Institute of Mathematics and the University.

4. List of the required documents:

- 1) application for employment to the Rector of Lodz University of Technology;
- 2) personal questionnaire for a person applying for employment at Lodz University of Technology, as provided in Annex no. 1.1 to the OTM-R POLICY - OPEN TRANSPARENT MERIT-BASED RECRUITMENT;
- 3) Data Privacy Statement as provided in Annex no. 1.2 to the OTM-R POLICY - OPEN TRANSPARENT MERIT-BASED RECRUITMENT;
- 4) Consent to the processing of personal data, as provided in Annex no. 1.3 to the OTM-R POLICY - OPEN TRANSPARENT MERIT-BASED RECRUITMENT;
- 5) true copies/copies of diplomas;
- 6) other documents proving the qualifications.

5. The place, manner, and deadline for submitting the documents (as well as information concerning their return);

Applications for the competition should be delivered to the following address

Institute of Mathematics of the Lodz University of Technology

90-924 Lodz, ul. Zeromskiego 116

with the note "Competition for the assistant professor position at I73" or sent by e-mail to the e-mail address: w7i73@adm.p.lodz.pl with the note "Competition for the position of assistant professor at I73" by June 12, 2023.

What counts is the date of receipt of the documents by the Institute of Mathematics. Candidates will be able to collect the documents submitted by them related to the competition for a period of 30 days from the date of the end of the competition.

Candidates meeting the formal requirements will be invited for an interview. Information regarding the interview will be sent to Candidates by e-mail.

6. Contact person and postal and e-mail addresses to which documents or scans thereof may be forwarded;

Additional information on the competition is provided by professor Katarzyna Szymańska-Dębowska, PhD, DSc; e-mail: katarzyna.szymanska-debowska@p.lodz.pl

7. The expected date of the announcement of the decision – July 14, 2023

Additional information for candidates:

8. The Institute of Mathematics is one of three units forming the Faculty of Technical Physics, Computer Science and Applied Mathematics (FTIMS) of the Lodz University of Technology.

The Institute conducts research related to the following modern areas of science: dynamics and control of systems in biomedical applications, dynamical systems and optimization in life sciences and medicine, non-linear and non-local boundary problems for differential equations, qualitative theory of difference equations, non-linear analysis, graph theory, combinatorial optimization using metric-type structures, algebraic structures in analysis and topology, statistics and probability theory, application of data analysis methods in social sciences, financial and insurance mathematics, life and property insurance, insurer solvency and incomplete financial markets, set theory, real and complex analysis, iterated function systems, functional inequalities.

9. If documents are to be sent by post, please write on the envelope 'Job Application'.

PERSONAL INFORMATION FORM
FOR APPLICANTS FOR EMPLOYMENT AT LODZ UNIVERSITY OF TECHNOLOGY

1. First name(s) and family name

2. Date of birth

3. Contact details
(provided by the applicant)

4. Education (where required for specific duties or jobs)
.....
(name of school and graduation date)

.....
(occupation, specialisation, degree, professional title, academic title)

5. Professional qualifications (where required for specific duties or jobs)
.....
(courses, postgraduate education, other forms of further development of knowledge and skills)

6. Employment history (where required for specific duties or jobs)
.....
.....
(employment periods and jobs held at previous employers')

7. Additional personal information, where the right or the duty to disclose it exists under specific regulations.....
.....
.....

.....
(place and date)

.....
(signature of the applicant)

Data Privacy Statement for job candidates

Pursuant to Article 13(1) and (2) of 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, Official Journal of the EU L 119/1), hereinafter referred to as "GDPR", we inform you as follows:

- 1) Lodz University of Technology with the registered office in Lodz is the Controller of your personal data;
- 2) We have appointed a Data Protection Officer to supervise the compliance of personal data processing, who can be contacted in matters concerning the protection of your personal data at the following e-mail address: rbi@adm.p.lodz.pl; telephone number: 42 631 2039; or in writing to the address of our registered office: Lodz University of Technology, Żeromskiego 116, 90-924 Łódź;
- 3) As the controller, we will process your data for the purpose of the recruitment process for the position indicated, based on your consent (Article 6(1)(a) GDPR);
- 4) You have the right to withdraw your consent to the processing of your personal data at any time, but such withdrawal shall not affect the lawfulness of the processing effected on the basis of your consent prior to its withdrawal;
- 5) You have the right to lodge an objection against the processing of the data as set out above at any time. We will cease to process your data for these purposes unless we can demonstrate that there are compelling legitimate grounds for us to do so which override your interests, rights, and freedoms, or that your data will be required for the possible establishment, assertion, or defense of claims;
- 6) Your personal data provided in the CV, personal information form for the applicant for employment, and copies of documents supporting your professional experience, education, additional credentials and qualifications will be processed for the period in which claims related to the recruitment process may arise, i.e. for 6 months following the conclusion of the recruitment process. For individuals who have given their consent to the processing of personal data for the purposes of future recruitment, for a period of 12 months following the conclusion of the recruitment process during which the consent has been given;
- 7) Only individuals authorized by the Controller to process your data in the performance of their duties will have access to your data;
- 8) Your personal data will not undergo automated processing and will not be subject to profiling;
- 9) Under GDPR, you shall further have:
 - a) the right to access your data and to receive copies thereof,
 - b) the right to rectification (amendment) of your data,
 - c) the right to erasure/to be forgotten, restriction of data processing,
 - d) the right to data portability,
 - e) right to file a complaint to the supervisory authority - President of the Personal Data Protection Office, Stawki 2, 00-193 Warsaw.

.....
(date and signature of the candidate)

**Consent of the candidate to the processing of personal data
(pursuant to Article 7 GDPR)**

I consent to the processing of my personal data by Lodz University of Technology, the Controller of the data included in the following documents that I have submitted:

.....
.....

for the purpose of recruitment/employment*.

I hereby declare that I have been informed of the right to withdraw my consent at any time, effective as of the date of submission of the withdrawal of consent.

The Controller (or an authorised representative) has also informed me that the withdrawal of consent does not affect the lawfulness of the processing performed on the basis of the said consent prior to its withdrawal.

.....
(date and signature of the candidate)

* delete as appropriate