

POST-DOCTORAL FELLOW IN NETWORK SCIENCE AND DATA SCIENCE

We are looking for a post-doctoral fellow to work in a project supported by the European Union project RRF-2.3.1-21-2022-00004 within the framework of the **Artificial Intelligence National Laboratory**.

We offer a **full-time 1-year position** (with the possibility of 1 year extension) for a postdoctoral researcher to work with Dr Roland Molontay at the **Human and Social Data Science Lab at the Budapest University of Technology and Economics**, Hungary. The successful candidate will have the opportunity to work at a highly interdisciplinary interface and will benefit from opportunities for a dynamic, collaborative and international research environment.

REQUIREMENTS:

- A recent (or upcoming) PhD in data science, network science, machine learning, computer science, statistical physics, applied mathematics, econometrics, computational social science or related fields
- Interest in interdisciplinary research, curiosity about AI, machine learning and network science
- Proven experience in at least one of the following topics:
 - o human-centered predictive analytics
 - o educational data science / learning analytics
 - o science of science / scientometrics
 - o social media analytics / social listening
 - o network embedding / graph neural networks
 - o anomaly detection
- Strong programming skills in Python
- Excellent verbal and written communication skills in English
- Ability to work independently and as part of a team

DUTIES AND RESPONSIBILITIES

The successful candidate will work on the following tasks:

- Conducting research in network science and data science
- Analyzing large datasets and developing machine learning models
- Developing algorithms and models for analyzing complex networks
- Participate in scientific publication writing and other types of dissemination
- Preparing and presenting research findings at conferences and seminars
- Participate in the scientific reporting of the project
- Supervise Bachelor and Master students and developers working at HSDSLab
- Support the teaching activities of HSDSLab (very modest teaching load determined in consultation with the candidate taking into consideration the department's needs)

Location: Budapest, Hungary

Job type: Full-time, Post-doctoral

Starting date: September 1, 2023

Application deadline: Applications will be reviewed on a rolling basis until the position is filled

ABOUT HSDSLAB

The Human & Social Data Science Lab (HSDSLab) is a group of researchers at the Budapest University of Technology and Economics led by Dr Roland Molontay. HSDSLab conducts both methodology oriented basic research in data and network science and applied research with a human-centered and societal focus. The lab members develop statistical and computational methods to study the empirical, theoretical, and technical dimensions of all forms of data in social, policy, and business contexts. The Lab's research includes predictive analytics in human health and education, user behavior analysis, data-driven assessment and evaluation in higher education, social network analysis, structural characterization of complex networks, explainable artificial intelligence in human-centered and social sciences, scientometrics.

APPLICATION PROCESS

To apply for this position, please send the following materials to **Dr Roland Molontay**

(molontay.roland@ttk.bme.hu):

- An **academic CV** with list of publications;
- A **research statement** describing how the candidate's research interests relate to this position;
- Please arrange to have **two letters of recommendation** sent directly to Dr Roland Molontay (molontay.roland@ttk.bme.hu)

The review of applications will start immediately.



molontay.roland@ttk.bme.hu



hsdslab.math.bme.hu



HSDSLab

Human & Social Data Science

