# Post-doc Position in Computational Oncology and Machine Learning within a research project "Machine learning methods for characterizing the tumor and its microenvironment from multidimensional molecular profiling data of tumors."

## Principal investigator: Ewa Szczurek

**Position:** We invite applications for a Post-doc position, within a research collaboration between Merck Healthcare KGaA and the University of Warsaw. The Principal Investigator at Merck Healthcare is Dr. Eike Staub, head of Oncology Bioinformatics.

#### Terms of employment

Selected candidate will be employed on employment contract. Project duration is negotiable, minimum 1 year, maximum 3 years (to be agreed with the selected candidate). Start of position: negotiable, available immediately. Location: Institute of Informatics, Faculty of Mathematics, Informatics and Mechanics at the University of Warsaw, Poland. Salary: c.a. 9 000 PLN monthly gross amount. Participation in conferences/scientific visits are a planned part of the project.

**Work environment:** lively, friendly and interdisciplinary research group, with wide international collaboration: https://www.mimuw.edu.pl/~szczurek/people.html, and a supportive PI: https://www.mimuw.edu.pl/~szczurek/

#### **Project outline:**

The project is focused on the development of machine learning methods for characterizing the tumor and its microenvironment from multidimensional molecular profiling data of tumors. Our methods are usually based on probabilistic graphical models and deep learning, with current focus on generative models. Apart from his/her own research project, the Post-doc is expected to collaborate with the research group at Merck Healthcare KGaA, as well as with students at the lab at the University of Warsaw. The Post-doc will be required to actively aim at publishing the project results.

#### Requirements: The candidate is expected to

- Hold a PhD degree, or be close to defending a PhD degree in computer science, mathematics, bioinformatics, or physics.
- Publications out of PhD.
- Excellent mathematical and computational background.
- Experience in programming, with code available for review at public sites such as github.
- Interest in applications in healthcare/medicine, in particular oncology.
- Fluency in English.
- Good writing and presentation skills.

We do not require but will highly appreciate a solid background or at least a strong interest in machine learning.

Application deadline: 5th of December 2021, 00:00 CEST

### How to apply:

Please send your applications per email to szczurek@mimuw.edu.pl, including:

- CV
- Recommendation letter and recommendation contact (we are likely to contact your Referee).
- Short motivation letter, explaining: 1) Why are you interested in this position, 2) What is your relevant research experience.
- Signed data clause (attached below).
- Selected candidates will be invited for an interview.
- During the interview, the selected candidates will be asked to give a 10 min presentation of their recent research project.

The results of the competition will be sent to candidates electronically on  $30_{th}$  of December, 2021 at the latest.