

PhD Positions in Artificial Intelligence for Healthcare

The [ARTORG Center for Biomedical Engineering Research](#) is the University of Bern's transdisciplinary Center of Excellence for medical technology research. Its mission is to tackle unmet clinical needs and envision future diagnosis, monitoring, and treatment challenges to create viable healthcare technology solutions with imagination, agility, and purpose. Its projects run from discovery and basic research to clinical translation.

The [Artificial Intelligence in Health and Nutrition \(AIHN\)](#) laboratory of the ARTORG Center has opened two (2) Ph.D. student positions in artificial intelligence. The duties of the successful candidate include interdisciplinary collaboration and research in the following topics:

- Machine learning with emphasis on deep learning and/or reinforcement learning algorithms.
- Analysis of multi-modal heterogeneous data including multiomics.
- Causal inference and learning with graph neural networks.

Requirements

- MSc in computer science, engineering, or applied mathematics preferably in the fields of artificial intelligence.
- Solid background in machine learning with emphasis on graph neural networks and reinforcement learning.
- Solid programming skills in Python, experience with deep learning frameworks preferred (e.g., PyTorch).
- Excellent command of English.
- Commitment to multidisciplinary research.

General Information

The candidates will be affiliated with the University of Bern as PhD students. The positions are funded for up to 4 years. Salary will be according to Swiss University regulations. The lab offers an international environment and the possibility to conduct excellent research. The PhD projects are part of a larger, international consortium and requires close collaboration with engineers, computer scientists, healthcare professionals, as well as with industrial partners.

Application

If you are interested in working in a group with an international, interdisciplinary profile please send the application to Prof. Stavroula Mougiakakou (stavroula.mougiakakou@unibe.ch). Applications should include: i) motivation letter, ii) detailed curriculum vitae, iii) abstract of the master thesis, iv) contact details of two referees. **The documents should be combined into ONE pdf file.**

The start date is expected to be in March 2024. Applications will be reviewed until the positions have been filled.

About the University of Bern

The University of Bern is located at the heart of Switzerland. Internationally connected and regionally anchored, it cultivates exchange with society and strengthens partnerships between science, medicine, business, and politics. The University of Bern is committed to a deliberate and ethical responsibility towards people, animate and inanimate nature. As an important educator, promoting enterprise and industry in the region and beyond, it distinguishes itself through problem-oriented research into questions of pressing social relevance. The University of Bern is an equal opportunity employer, promotes healthy work-life-balance and safe working environments, and strives to increase the number of women at all levels in its faculties.