Ph.D. & PostDoc positions in Health Data Science & AI in Medicine projects

The Machine Learning and Data Analytics Lab (MaD Lab, https://www.mad.tf.fau.de) at the Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU) invites applications for several open PhD and/or postdoctoral positions in the areas of health data science and AI in medicine. The associated research projects are focused on i) clinical trial data analysis with a major pharmaceutical industry partner, ii) intelligent user interface research within the EIT Health PDNetGo project, iii) computer-vision based movement tracking for therapy monitoring (DiGA) in cooperation with a startup, iv) data integration and AI-based analysis of health data within the pan-European TEF-Health project (https://www.tefhealth.eu), v) federated machine learning for personal health dataspaces within the BMWK-funded TEAM-X project (https://project-team-x.eu), and vi) medical data science research in close cooperation with several cooperation partners within the University Hospital Erlangen.

Position information

We are seeking highly motivated doctoral candidates (Dr.-Ing.) or postdoctoral coworkers for these exciting research projects. The projects aim to develop advanced (machine learning) algorithms with concrete applications in healthcare and medicine. More information on the individual projects is available upon request. You will be responsible for researching novel algorithms, and for implementing and validating them in real-world settings. These interdisciplinary projects will involve close collaboration with industry and medical partners, fostering a dynamic and innovative research environment.

Research environment

The Machine Learning and Data Analytics Lab is spart of the new Department Artificial Intelligence in Biomedical Engineering of FAU, one of Germany's largest universities. With its five faculties, FAU offers a scope of subjects ranging from the Humanities to Law and Economics, as well as Sciences, Medicine, and Engineering. FAU's mission statement, "Moving Knowledge", reflects the close collaboration between the individual disciplines.

The MaD Lab at FAU researches machine learning algorithms and ubiquitous computing systems. The motivation of the MaD Lab researchers is to improve human well-being by contributing to applications in real-world settings. Detailed information on ongoing projects is available on our website, via our publications, and upon request.

Requirements

The ideal candidates for these positions demonstrate a strong research passion, particularly in addressing medical research questions. Prospective PhD candidates should hold a master's or equivalent degree in Biomedical Engineering or a related field (e.g., Computer Science, Electrical Engineering) from a prestigious university with an above-average grade, postdoctoral candidates should be able to additionally demonstrate above-average research abilities obtained during their PhD. Proficiency in both written and spoken English is essential. Additionally, desirable qualifications include knowledge or experience in one or more of the following areas:

- Machine learning / deep learning / computer vision
- Health / medical data science
- Intelligent user interfaces
- Wearable sensor technology

Moreover, the candidates should be motivated to work within a fantastic interdisciplinary team and should exhibit exceptional social skills, drive, and dedication.

Program details and contact for application/questions

Positions can start September 1, 2023 or later. Funding is available through a **TV-L E13 position with duration of three years for PhD candidates and two years for postdoctoral coworkers**; extensions are possible. Prospective applicants should apply with a motivation letter (max. 1 page), academic CV, and optional certificates as one document. Applications will be accepted until positions are filled.

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