



Research Associate: Curriculum Development in Teaching Algorithmic Fairness (8-12 months; 40-60%)

We are offering a research associate position on the topic of Algorithmic Fairness with a particular focus on curriculum development. The research associate will contribute to the project “Socially acceptable AI and fairness trade-offs in predictive analytics in recruitment and education/training”, funded by the Swiss National Science Foundation within the National Research Program 77 “Digital Transformation”. The position is advertised by the University of Zurich (UZH) in collaboration with the Zurich University of Applied Sciences.

Your responsibilities

The main responsibility is to develop a teaching curriculum for a new course in Algorithmic Fairness, targeted to students of Computer Science or to Data Science practitioners. The course is based on a new approach developed in the aforementioned project. This approach combines the ethical/philosophical perspective (what is fairness?) and the technical perspective (how to design fair algorithms in a Machine Learning context?) in an integral methodology on fairness-by-design. This methodology enables computer scientists to develop data-based decision algorithms that are compatible with expectations of the different stakeholders, in particular combining moral expectations on social justice and fairness with other (e.g. business-related) goals. An important element of this approach is a recently developed analysis and visualization tool, the “Fairness Lab”.

Within this position, a teaching curriculum is to be developed for teaching the topic of Algorithmic fairness in an interdisciplinary approach, based on the findings and approaches of the research project. This includes developing a structured teaching schedule, creating all material necessary for teaching (teaching slides, worked out technical and ethical exercises for both Computer Scientists and Data Science practitioners, accompanying reading material, etc.) and piloting the curriculum.

The research associate is supervised by Prof. Christoph Heitz (ZHAW, Computer Science) and Dr. Michele Loi (Politecnico Milano, ethics and philosophy). Formal superior is PD Dr. Markus Christen (head of the DSI Digital Ethics Lab).

Your profile

The person to be hired ideally has the following competencies; however, applications that only partially meet these competencies will also be considered:

- PhD in either Computer Science (or related fields) or philosophy/ethics (or related fields)

- Experience in curriculum development
- Programming skills and experience in working with data, machine learning and modeling
- Basic knowledge in the field of algorithmic fairness respectively fairness theories in general from a philosophical perspective
- Teaching experience in a university environment

Generally, we expect team spirit, commitment and pleasure in working with students in computer science, philosophy, and management; as well as fluency either in German or English and very good command of the other language.

What we offer

We offer competitive employment conditions at UZH, a highly engaging research environment at the Digital Society Initiative (DSI) and plenty of opportunities for interdisciplinary exchange. Salary will be according to UZH regulations (salary depends on the experience of the person). Workplace of the person is mainly at the ZHAW in Winterthur, but a workplace at the Digital Ethics Lab (located at the Institute of Biomedical Ethics and Medicine of UZH) will be provided as well.

The duration of the contract is flexible, between 8 months (with a 60% employment) and 12 months (with a 40% employment).

Screening of applicants will start on March 30, 2022 and continue until the position is filled.

Please provide the following in a single pdf file when applying for the position:

- Cover letter indicating the position you are applying to, stating your motivation, experience and skills you could bring to the project (2 pages max)
- Detailed CV (3 pages max)

Please send all material to Markus Christen (christen@ifi.uzh.ch). If you have any questions related to this position, please contact Prof. Christoph Heitz (christoph.heiz@zhaw.ch) or Markus Christen (christen@ifi.uzh.ch).

Place of work

Zurich University of Applied Sciences, Winterthur, Switzerland and Digital Ethics Lab, Institute of Biomedical Ethics and History of Medicine (UZH)

Start of employment

By agreement.