



The [Computation and Economics Research Group](#) of the Department of Informatics at the University of Zurich (UZH), led by [Prof. Dr. Sven Seuken](#), is inviting applications for:

## 2 Postdoc positions in (a) Machine Learning and (b) Economics and Computation/Algorithmic Game Theory

**About us:** The group currently consists of one professor and 4 PhD students. All group members have a strong background in mathematics/computer science and work on market design research questions. Market design is a research field that combines techniques from computer science, game theory, operations research, and other fields. Its goal is to design new, well-functioning marketplaces or repair ones that are broken. In our research group, we study foundational market design questions from an algorithmic/computational and game-theoretic perspective. Current group members work on a variety of projects including machine learning-powered combinatorial auctions, cloud computing markets, equilibrium finding algorithms, and adoption marketplaces. We publish our research in the top international conferences and journals in the areas of AI and Economics and Computation. In some projects, we also collaborate with industrial partners such as Google Research and Microsoft Research.

### We offer:

- a team of young and highly motivated colleagues who are passionate about topics at the intersection of computer science and game theory (in particular: market design)
- a competitive salary of approximately 90,000 Euro per year and generous social benefits
- generous support for professional travel and research needs
- no teaching requirements: but if desired, opportunities to gain teaching and mentoring experience and strong support for your career development
- an attractive work environment both within the research group and beyond: the University of Zurich is one of Switzerland's leading universities in the middle of a vibrant, cosmopolitan city that regularly ranks as one of the cities with the highest quality of life in the world.

### You have:

- a PhD degree in computer science or a related field (e.g., mathematics or operations research)
- an excellent publication record in your field
- a passion for research at the intersection of computer science and game theory
- excellent communication skills in English (German speaking skills are not necessary)

**For the Postdoc in Machine Learning** we accept applications from all candidates with a PhD who have a strong background in Machine Learning. The successful candidate will join the ERC project on "Machine Learning-based Market Design (MIAMI)" led by Prof. Dr. Sven Seuken. On a high level, the research question to be investigated in this project is how we can combine techniques from machine learning with market design to develop better market mechanisms. The ideal candidate has already published papers in the top ML/AI conferences such as ICML, NeurIPS, KDD, AAAI and IJCAI. Prior research experience in Algorithmic Game Theory is desirable but *not* required. The exact starting date is flexible/negotiable. The duration of the position is between 1 and 4 years, depending on the candidate's career plans.

**For the Postdoc in Economics and Computation/Algorithmic Game Theory** we accept applications from all candidates with a PhD in the area of Economics and Computation/Algorithmic Game Theory. This includes candidates who do theory, AI, OR, empirical or experimental work. The exact starting date is flexible/negotiable. The duration of this position is between 1 and 6 years, depending on the candidate's background and career plans.

If you fit one of these profiles, like challenging tasks, and are passionate about research, then we would love to hear from you. Women are particularly encouraged to apply. To submit your application, please go to: <http://www.ifi.uzh.ch/en/ce/jobs/postdoc.html>

The positions will be open until filled. The exact starting date is negotiable/flexible. Further information about the research group is available online at: <http://www.ifi.uzh.ch/ce>. For inquiries about the positions, please contact [seuken@ifi.uzh.ch](mailto:seuken@ifi.uzh.ch).

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