



The [Computation and Economics Research Group](#) 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 9 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 and game-theoretic perspective. Current group members work on a variety of projects including combinatorial auctions, data markets, cloud computing markets, financial markets, equilibrium finding algorithms, and machine learning-powered market mechanisms. 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 82,000 - 90,000 Euro per year and generous social benefits
- generous support for professional travel and research needs
- an opportunity 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, economics, 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 are accepting 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 multiple papers in the top ML conferences such as ICML or NIPS. Expertise with kernel methods, SVRs, NNs, or recommender systems is a plus. Prior research experience in Algorithmic Game Theory is desirable but not required. We are looking for candidates who can ideally start between February and July 2019, but the exact starting date is flexible. The maximum duration for this position is 3 years.

For the PostDoc in Economics and Computation/Algorithmic Game Theory we are accepting applications from all candidates with a PhD in the area of Economics and Computation/Algorithmic Game Theory. This includes candidates who have mostly done theory, AI, empirical or experimental work. The ideal starting date for this position is July 2019, but the exact starting date is flexible/negotiable. This position will initially be for 1 or 2 years, depending on the candidate's background, but a further extension may be possible.

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>

All applications **received by December 15, 2018** will be considered. Applications received afterwards will be considered until both positions are filled. Further information about the research group is available online at: <http://www.ifi.uzh.ch/ce>.