University of Zurich UZH

Department of Informatics

Computation and Economics Research Group
University of Zurich
Binzmühlestr. 14
8050 Zurich
www.ifi.uzh.ch/ce

The Computation and Economics Research Group at the University of Zurich is inviting applications for

1 fully funded PhD position in Computer Science (Algorithmic Game Theory + AI/Machine Learning).

You will work with **Prof. Dr. Sven Seuken** on high-impact **market design** research projects. 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 machine learning-based combinatorial auctions, data markets, cloud computing markets, financial markets, and equilibrium finding algorithms. The focus of this new position will be on the intersection of AI/machine learning, market design, and algorithmic game theory. Most of our projects are funded by the ERC and the Swiss National Science Foundation. We have an international network of collaborators, including at companies such as Google and Microsoft. We publish in the top conferences and journals in AI and Economics and Computation.

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 55,000 Euro per year and generous social benefits
- generous support for professional travel and research needs
- an opportunity to gain teaching/mentoring experience and 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 master's degree in computer science or a related field (e.g., mathematics, economics, or operations research). Highly qualified students with a bachelor's degree may also apply.
- an interest in topics at the intersection of computer science and game theory
- strong mathematical skills and a good background in theoretical computer science
- excellent communication skills in English (German speaking skills are not necessary)
- prior knowledge in game theory, machine learning, AI, or optimization is desirable but not required.

If you fit this profile, 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/phd.html

All applications received by **August 16, 2019** will be considered. Applications received afterwards will be considered until the position is filled. The preferred starting date is September 9, 2019, but the exact starting date is flexible/negotiable. Further information is available online at: http://www.ifi.uzh.ch/ce.

Prof. Dr. Sven Seuken
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