

# Doctoral Student Position in Adaptive Decision Making and Cognition

The Modeling Adaptive Cognition Research Group at the Faculty for Business and Economics at the University of Lausanne seeks applicants for a doctoral student position. The position (60%) is to begin February 1st, 2012, or on another starting date to be mutually agreed upon. The position has a maximum funding duration of 5 years. The work location is the University of Lausanne, Lausanne Dorigny, Switzerland. Successful candidates will receive a Ph.D. from the University of Lausanne. The gross salary ranges from about 35,000 Swiss Francs to about 43,800 Swiss Francs per year.

## Job description

We seek applicants to work on an interdisciplinary research program on modeling adaptive decision making processes and cognition in real-world domains. Current and past researchers working on this program have had backgrounds in psychology, cognitive science, economics, mathematics, biology, physics, and computer science to name but a few.

We provide excellent resources, including a fully-equipped laboratory for conducting experiments and computer simulations, generous travel support for conferences, an excellent international research network, and most importantly, the time to think.

The position is heavily-research oriented, preparing for a career in academia. We expect Ph.D. candidates to publish their research in top-tier journals. There are no teaching obligations. We are an international research group. Our working language is English.

## Research on Adaptive Decision Making Processes and Cognition

Research on adaptive decision making processes and cognition addresses a key question: How do humans and other animals make decisions under uncertainty, that is, when time and information are limited and the future is unknown? In experiments, computer simulations, and mathematical analyses, we study both (i) how people (e.g., managers, politicians, consumers, doctors) make such decisions, and (ii) how they ought to make these decisions in order to behave adaptively. In doing so, we build detailed computational models of how decision processes are adapted to the structure of the environment, as well as how the decision processes interplay with other cognitive processes, such as memory or time perception. Building such models helps us to address basic research questions as well as to tackle a wide range of problems in the applied world. For instance, past areas of research include modeling how people select from a repertoire of decision strategies, how people make inductive inferences, how memory is nestled into to the structure of the environment, how to predict memory retrieval using internet search engines such as Google, how to forecast the outcomes of political elections, how to predict consumer choice, how to help doctors make better diagnoses, or how to foster moral decision making in organizations, to name but a few.

## Requirements

Applicants should be interested in modeling decision and/or other cognitive processes. A university degree in psychology, business, economics, mathematics, computer sciences, physics, biology, or in a related discipline as well as good English skills are required. Already existing modeling or programming skills (e.g., MATLAB, R, LISP, ACT-R) are helpful but not required.

## Application materials and deadline

The application deadline is January 9<sup>th</sup>, 2012, but applications will be accepted until the position is filled. Application materials include a cover letter describing research interests, a curriculum vitae, university transcripts, and up to two letters of recommendation. Please submit your materials via email to [julian.marewski@unil.ch](mailto:julian.marewski@unil.ch).

## Working at the University of Lausanne

The Modeling Adaptive Cognition Research Group is located at the Department of Organizational Behavior of the Faculty for Business and Economics at the University of Lausanne. The department provides a stimulating interdisciplinary research environment. We publish in top-tier journals in different disciplines, including Science, Psychological Review, and the American Economic Review.

Located at Lake Geneva and surrounded by the Jura Mountains and the French Alps, Lausanne is a beautiful and cosmopolitan spot to live and work. The Lake Geneva region enjoys a Mediterranean microclimate.

More information about the position can be inquired from the responsible professor, Julian Marewski ([julian.marewski@unil.ch](mailto:julian.marewski@unil.ch)). Information about the Modeling Adaptive Cognition Research Group is available at <http://www.modeling-adaptive-cognition.org/>. Information about the Department of Organizational Behavior can be found at [http://www.hec.unil.ch/hec/recherche/unite?set\\_language=en&unite\\_id=239&cl=en](http://www.hec.unil.ch/hec/recherche/unite?set_language=en&unite_id=239&cl=en). Information about Julian Marewski can be found at <http://www.mpib-berlin.mpg.de/en/staff/julian-marewski> and at [http://www.hec.unil.ch/people/jmarewski&vue=contact&set\\_language=en&cl=en](http://www.hec.unil.ch/people/jmarewski&vue=contact&set_language=en&cl=en).