



Open position for LMU-CSC scholarship candidates

Department/Institute: General and Experimental Psychology, Psychology Department

Subject area: Neuro-cognitive Psychology

Name of Supervisor: PD Dr. Zhuanghua Shi, Prof. Dr. Hermann Müller

Number of open positions: 1

Project title: Perceptual bias and sequential context

Project description:

Our perception is strongly influenced by contextual information. A well-known example of this type perceptual bias has been documented in a Confucius story “Two Children arguing about the sun”(ca. 500 BC). In Western, Helmholtz (1867) proposed that perception is a process that constructs a hypothesis about what the world is like based on our sensory input and our implicit prior assumptions. Helmholtz’s idea has now been implemented in Bayesian frameworks (Knill & Richards, 1996). Yet, the dynamic influence of history-based sequential context on perceptual bias is less well understood. The aim of this project is to uncover how natural and unnatural sequences of stimuli influence perceptual judgments, and to use Bayesian inference to predict behavioural results. In addition, we aim to identify underlying neural mechanisms using EEG and fMRI methodologies.

Literature references see <http://msense.de/publications/>

Language requirements: The candidates should have a good level of English. Our group and institute is an international environment with communication language in English

Academic requirements: The candidate should have a master degree in Psychology, neuroscience or related fields. The ideal candidates should have knowledge and experience in neuroscience and computational skills (such as R, Python).

Applicants should first contact the international office for formal evaluation. The complete application, including a cover letter detailing their research experience and interests, a CV and two academic references, should be sent to Dr. Zhuanghua Shi (strongway@psy.lmu.de).

Contact:

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