EBERHARD KARLS UNIVERSITÄT TÜBINGEN

HiWi position in online experiment development

The "Human and Machine Cognition" lab led by Dr. Charley M. Wu in the ML Cluster of Excellence and in collaboration with Harvard and MIT

Application deadline: 01.04.2023

The project

Cultural psychologists have documented how some societies are "analytic" while others are "holistic". People in analytic societies tend to understand the world through abstract categories and context-independent cognition, whereas people in holistic societies tend to understand the world more through statistical regularities and contextually embedded cognition. In past studies, the emphasis has often been on the contrast between the analytic West (e.g., US, Western Europe) and the holistic East (e.g., East Asia–though emerging research suggests that cultural groups from much of the rest of the world are holistic as well), but the computational mechanisms that underpin this cross-cultural variation remain obscure.

In this project, we test the hypothesis that the analytic–holistic distinction emerges from differences in Bayesian priors and in the updating process, which are in turn shaped in a principled way by the human (teaching practices) and non-human (local ecologies) information environment. This study aims to ground cultural psychology in computational models of cognition and their population-level consequences.

Your qualifications

Keywords: Javascript, HTML, PHP, & SQL.
You should be familiar with front-end web design or have strong programming skills and be interested in picking up new technologies quickly. An eye for detail and interest in experiment design and user interface design are important qualities in a good candidate. Interest in cognitive science, Bayesian modeling, and cultural evolution is encouraged.

The position

The selected applicant will help us program and run online behavioral experiments that aim to recreate holistic and analytic thinking "in the lab". The position will also involve tasks such as piloting the experiment, managing participants, and ensuring data is saved correctly to the database. The selected applicant will work closely with the Human and Machine Cognition Lab as well as key collaborators at Harvard and MIT. The position will be initially offered for 6 months and between 10-20 hours per week. The start date is negotiable, but would ideally be as soon as possible.

Application

Get in touch with Ryu Uchiyama [ryutaro.uchiyama@uni-tuebingen.de] for informal enquiries about the project. When applying, please attach a brief cover letter and a CV as a single pdf. Please include links to online code repositories to demonstrate prior programming experience. Completed applications should be submitted to the email address above.