

The "Human and Machine Cognition" lab of the Cluster of Excellence "Machine Learning: New Perspectives for Science" and the "Tübingen Al Center" invites applications for an open

# PhD position (m/f/d; E13 TV-L, 65%)

to be filled as soon as possible. The position is limited to three years.

## About the group:

The HMC lab is led by <u>Dr. Charley M. Wu</u> and operates at the intersection of Human Cognitive Science and Machine Learning research. The focus of this position will be to study the strategies that humans use to learn from and interact with other people in social settings. Potential topics include the integration of social and individual information, computationally tractable implementations of Theory of Mind inference, and cumulative cultural evolution in online communities, in addition to the interests of the candidate.

Members of the lab are working on a diverse set of topics including, structure learning in planning and search, developmental changes in learning and exploration, inductive biases in compositional learning, and many more. Our research methods include online experiments (commonly in the form of interactive games), lab-based virtual reality experiments, computational modeling of behavior, evolutionary simulations, developmental studies (comparing children and adults), fMRI/EEG, and analyzing large scale real-world datasets. We have a rich collaboration network of researchers from Harvard, Princeton, UCL, and several Max Planck Institutes around Germany. To find out more, visit the lab website at <a href="https://www.hmc-lab.com">www.hmc-lab.com</a>.

## About the position:

The candidate should hold a MSc degree in cognitive science, computer science, psychology, computational neuroscience, statistics, or any relevant discipline. The ideal candidate should be self-motivated, comfortable with both analytic and critical thinking, and have a passion for science. Please indicate in your application if you have prior experience with conducting experiments, computational modeling, machine learning, and/or neuroimaging (EEG/fMRI). Skills in computer programing languages (e.g., R, Python, Matlab, Javascript, Java, etc.), mathematics, writing (in English), and the ability to independently manage a project (of any type) should also be mentioned.

## **About Tübingen:**

Tübingen is a scenic university town on the Neckar river in South-Western Germany. The quality of life is exceptionally high and the atmosphere is diverse, inclusive, and most locals speak English. Tübingen offers excellent research opportunities due to the University, four Max Planck institutes, the University Hospital, and Europe's largest Al research consortium. You can find out more about Tübingen here: <a href="https://www.tuebingen.de/en/">https://www.tuebingen.de/en/</a>

#### How to apply:

Please send a cover letter, a description of your research interests (max 1 page), your CV, the names and email addresses of 2-3 referees, and unofficial copies of your University degrees to Charley Wu (charley.wu[at]uni-tuebingen[dot]de). If you have any questions about the position, please do not hesitate to contact Charley directly. The university seeks to raise the number of women in research and teaching and therefore urges qualified women academics to apply for these positions. Equally qualified applicants with disabilities will be given preference. The employment will be carried out by the central administration of the University of Tübingen. Please submit your application by May 15<sup>th</sup>, 2021.