PhD Position in Computational Psychology (salary level TV-L E13 100%)

Visual Information Sampling Using Eye-movements and Overt Attention in Dynamic Scenes

Reference number: IV-790/23 (starting date: May 1st, 2024 / for up to three years / closing date for applications for full consideration: January 18th, 2024 / applications will be accepted until the position is filled).

Working field: This position is part of an interdisciplinary project between psychology, computational neuroscience, and computer vision. The successful candidate will conduct model-based data analyses of human behavioral and eye-tracking data and will perform the computational modelling of eye-movement patterns with help of the ScanDy saccade prediction framework (cf. Roth N., Rolfs M., Hellwich O., and Obermayer K. (2023), Objects Guide Human Gaze Behavior in Dynamic Real-World Scenes, PLoS Comput. Biol. 19, e1011512). Investigations will address the relationship between task, gaze behavior, and scene memorization when inspecting dynamic scenes and the mechanisms and functional consequences of inter-individual differences in human visual sampling strategies. The candidate is supposed to join the PhD program of the Cluster of Excellence “Science of Intelligence” (https://www.scienceofintelligence.de/, specifically projects PJ 01 and PJ 57) which this position is part of. Information about our research group can also be found at https://www.tu.berlin/en/ni.

Requirements: Successfully completed university degree (Master, Diplom or equivalent) in Computational Neuroscience, Computer Science, Physics, Mathematics, or related fields. Applicants should have very good programming skills, a very good command of the English language, a solid mathematical background, competence in machine learning, and a strong interest in visual perception. Working experience in the field of computational neuroscience and an additional background in psychology and / or neuroscience is an advantage.

Please send your application with the usual documents only by e-mail to Prof. Dr. Obermayer at klaus.obermayer@tu-berlin.de, quoting the reference number.