Gaze-Aware Feedback Laboratory for Engineering Assistance

Due to constant changes in design requirements in development projects, the design engineer is required to have both versatile and detailed knowledge. In addition, there are other influences on the design engineer which make the job faster, more complex and more versatile.

You develop an environment in which the design engineers can be supported in a targeted and situation-dependent manner.

By using eye tracking and, for example, auditory feedback, you generate test data from empirical studies that can be used as input for machine learning. By providing situation-specific and individual assistance, you support the design engineer in synthesizing effectively. Imagine an assistance system like Google, which recommends components based on the problems according to relevance, ranking and availability.

Task:
Analysis and description of machine learning in design
Development of a self-learning assistance system based on eye-tracking data
Evaluation of individual procedures during the creation of the product design
Participation for example in the e-learning course: https://www.coursera.org/learn/machine-learning

Profile:
- You work single-mindedly and independently.
- Are you creative and looking for challenges?

Then send me an e-mail Markus.Doellken@kit.edu