UNIVERSITÄT MANNHEIM

20th February 2024

Announcement:

Bachelor's or Master's thesis on the topic of „Emotion Identification with Generative AI: Evaluation and Validation of GPT-Classified Data for Advancing Mobile Health Applications"

At the Chair of **General Management and Information Systems** by Prof. Heinzl, starting as soon as possible.

Topic Description:

Large Language Models (LLMs) and generative AI (e.g. Chat-GPT) can be used to recognize, name, and classify emotions in text-based data. The AI-based classification of texts can then be utilized for various applications in business and research. However, to improve precision, reliable validation and detailed verification of the AI-generated results are necessary.
This thesis deals with the professional validation of Chat-GPT classified labels for short text passages generated as user input of a mobile health application. This includes the analysis of short texts and their labels to identify patterns and trends in emotion recognition by LLMs. Based on the findings and with the help of relevant literature, a coding schema is subsequently created. This is intended to serve experts as a guide for the subsequent manual categorization of texts. Contacting experts and an empirical data collection with experts in the field of emotion psychology or related areas is part of the thesis with the goal of creating a valid test data set for further research. The scope of the thesis may vary and will be adjusted accordingly for bachelor's or master's theses.

Profile of Requirements and Required Qualifications:

- Business Informatics or Mannheim Master in Management student
- Independent work style for literature research and methodological as well as theoretical analyses
- Open communication for collaboration with experts from other disciplines

Who we are:

The Chair of General Management and Information Systems is characterized by a high interdisciplinary orientation with employees from the field of Business Informatics, Information Systems, Psychology, Business Administration, and Computer Science. Together, we work on various topics at the interface between technology, human beings, and economics. The thesis is part of the project „Data-Driven, mHealth Induced Behaviour Change" funded by the German Research Foundation (DFG).

If you are interested, please send a brief application including your CV and most recent transcript of records to Mechthild Pieper (pieper@uni-mannheim.de).