



Master's Thesis Offer

Development and evaluation of an AI-powered empathic healthcare chatbot

Context

Chatbots are a promising touch point for health consumers for the provision and promotion of digital health interventions. Together with carecircle AG and Microsoft GmbH we are developing and investigating the use of an AI-powered empathic healthcare chatbot that will be integrated into the health social network platform carecircle in an Innosuisse-funded project. The chatbot will serve as the primary interface to users facilitating interactions and engagement with services and content provided on the health social network platform.

Scope of the thesis

This thesis targets the development and evaluation of the initial use cases for an AI-powered empathic healthcare chatbot that will be integrated into the patient-centric digital health platform carecircle. Integrating natural language processing and sentiment analysis will allow us to tailor the chatbot to meet patients' expectations of a natural dialogue with healthcare providers. Together with a larger research and development team, the student will co-develop an ML/AI-powered chatbot (prototype) built on Microsoft Azure and the Microsoft Bot Framework and evaluate different chatbot designs with regard to user adoption and engagement measures.

Major tasks include, but are not limited to

- Review and synthesis of relevant literature
- Development of a research question, research approach, and dedicated hypotheses
- Development of a chatbot prototype and integration of initial use cases
- Evaluation of user adoption and engagement
- Summary of results

Requirements

We are looking for a tech-savvy, self-driven student with a background in machine learning, natural language processing, and/or computational linguistics. Experience with the Microsoft Bot Framework, Microsoft Azure, and/or LUIS are highly welcome. A general interest in (digital) healthcare, chatbots, and human-computer interaction are required.

Start: as soon as possible
Methodology: Mixed Methods
Duration: 6 months

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