

Social paper: Artificial intelligence meets mental health

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Our recent projects involve, 1) using artificial intelligence (AI) to understand users of e-mental health services using user-event log analysis and unsupervised machine learning, and 2) developing new AI tools such as chatbots for interacting with mental health support services. Regarding the former, we have analysed helpline caller data from 3.5 million calls using k-means clustering to determine archetypical caller characteristics and have developed decision trees to predict these caller types, allowing for enhanced operational management within helplines [1-2]. We have also analysed user log data to uncover archetypical users of a maternal mental health smart phone app (called Moment Health). Both studies resulted in a new data analytics pipeline known as Health Interaction Log Data Analytics (HILDA) [3]. In addition, we have developed chatbots for delivering mental health services given they provide conversational support to those in need 24 hours a day [4-6]. We are involved in an ESRC funded project (INSPIRE) and a H2020 project (MENHIR) on the development of chatbots for mental health support. In conclusion, we have substantial experience in using AI for understanding users of digital mental health services and for developing new e-mental health tools. I would be delighted to interact with other delegates in this workshop and would be excited to attend.

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