



ALESSA GRUND

Cognitive Science B.Sc.
Biomedical Computing M.Sc.

CONTACT:



Alessa.Grund@med.uni-muenchen.de



Hospital of the University of Munich
Clinic for Psychiatry and
Psychotherapy Nussbaumstraße 7
80336 München

PROFILE

I am currently pursuing a PhD in predictive psychiatry, focusing on the development of explainable deep learning models applied to multimodal data such as MRI and clinical data. I am particularly interested in unsupervised generative models and the insights they can provide. In addition to my PhD, I am also heavily involved in a medical product study called CARE, which aims to bridge the gap between research and clinical practice. The study involves calculating a risk score using machine learning that predicts the likelihood that an individual patient will develop psychosis within the next year. This risk score will enable intensive treatment for patients who are classified as high-risk.

I earned a bachelor's degree in cognitive science at the University of Osnabrück, focusing on what intelligence is and how it can be transferred to machines. I then went abroad, to Canada and the UK, to deepen my studies and gain valuable experience in internships. I then completed my Master's in Biomedical Computing at TUM, where I focused on the application of machine learning in medical imaging. For my thesis, I collaborated with a medical technology start-up to develop software that visualizes electrical propagation in the heart and provides guidance for cardiac surgery. I am passionate about developing new technologies to address important medical challenges.

PUBLICATIONS:

- Cinq-Mars J, Blumenthal A, Grund A, Héту S, Blanchette I. DLPFC controls the rapid neural response to visual threat: An ERP and rTMS study. *Brain Res.* 2022 Jun 1;1784:147850. doi: 10.1016/j.brainres.2022.147850. Epub 2022 Feb 26. PMID: 35231420.