Dr. RIYA PAUL
Engineer in Electrical Engineering and Information Technology
Post-Doc Researcher

CONTACT:

☎

089/440053447

✉

Riya.Paul@med.uni-muenchen.de

📍

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

PROFILE

I did my doctoral research work in the field of machine learning in psychiatric disorders, mainly clustering in high dimensional datasets in Max Planck Institute of Psychiatry, Munich. My area of expertise includes medical image computing, neuroimaging, and clinical data analysis applied to find subtypes in psychiatric disorders using unsupervised multivariate machine learning and supervised predictive modeling to classify the subtypes in psychiatric disorders. The focus of my research in Prof. Koutsouleris' group involves the identification of predictors of disease onset and treatment response in psychosis. The core aim of the research project is to perform multi-scale, multimodal stratification, and comorbidity analysis in psychiatric disorders. This involves the application of machine learning and deep learning methods to multimodal imaging, clinical, psychosocial data. This work is a part of COMorbidity Modeling via Integrative Transfer machine learning in MENTal illness (COMMITMENT). The overall main aim is to exploit the translational potential of this information, using it to inform the development and evaluation of novel predictive tools for early detection and treatment

PUBLICATIONS

- Paul, R., Andlauer, T.F., Czamara, D., Hoehn, D., Lucae, S., Pütz, B., Lewis, C.M., Uher, R., Müller-Myhsok, B., Ising, M. and Sämann, P.G., 2019. Treatment response classes in major depressive disorder identified by model-based clustering and validated by clinical prediction models. Translational psychiatry, 9(1), pp.1-15.

- Popovic, D., Ruef, A., Dwyer, D.B., Hedderich, D., Antonucci, L.A., Kambeitz-Ilankovic, L., Öztürk, Ö.F., Dong, M.S., Paul, R., Kambeitz, J. and Ruhrmann, S., 2020. O8. 5. SIGNS OF ADVERSITY-A NOVEL MACHINE LEARNING APPROACH TO CHILDHOOD TRAUMA, BRAIN STRUCTURE AND CLINICAL PROFILES. Schizophrenia Bulletin, 46(Supplement_1), pp.S20-

S20. 3 Lucas Miranda, Riya Paul, Benno Pütz, Bertram Müller-Myhsok. Functional MRI applications for psychiatric disease subtyping: a review (https://arxiv.org/abs/2007.00126)

.