# Understanding behavior and disorders using brain imaging data
Dr. Kaustubh Raosaheb Patil (Forschungszentrum Juelich)

Brain imaging data, such as structural and functional MRI, can be used to understand behavior. Using machine learning algorithms, patterns within the brain imaging data can be identified and used to predict behavior or diagnose disorders, providing insights into underlying neural mechanisms. This approach has the potential to greatly improve our understanding of behavior and disorders, leading to more accurate diagnoses and effective treatments. In this talk, I will discuss various applications ranging from the prediction of age to the prediction of the dimensional construct of schizophrenia symptomatology by applying machine learning approaches to MRI data.
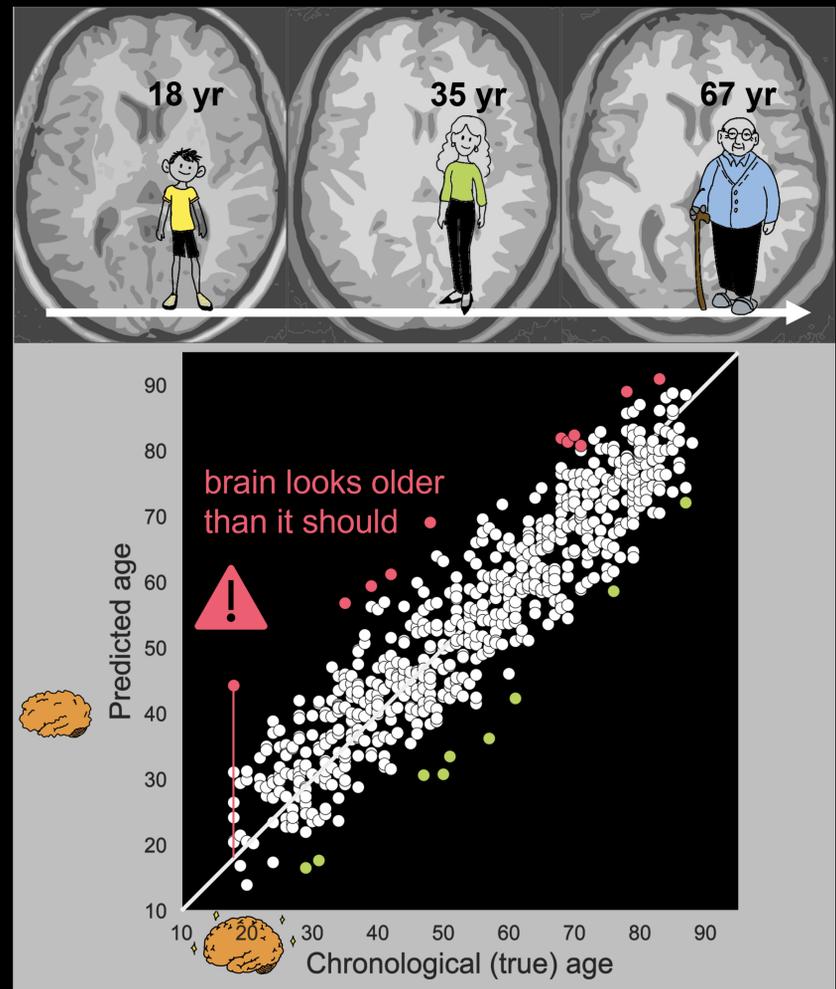
Kaustubh R. Patil received his Bachelor's degree in Electronics Engineering from Shivaji University, India in 2003. He then went on to pursue his Master's degree in Artificial Intelligence and Intelligent Systems from the University of Porto, Portugal, which he completed in 2007. In 2013, he earned his Ph.D. degree from the Max-Planck Institute of Computer Science, Germany. After completing his Ph.D., Kaustubh worked as a postdoctoral fellow at both the University College London (UCL) and the Massachusetts Institute of Technology (MIT) between 2013 and 2016. He then joined the Forschungszentrum Jülich (FZJ) in 2017, where he now leads the applied machine learning group. His group focuses on designing and evaluating machine-learning algorithms and pipelines to better understand biological systems, particularly those related to mental health and psychiatric disorders, as well as a basic understanding of brain structure, function, and development using magnetic resonance imaging data.

Monday, AG-66, TIFR Mumbai

April 10, 2023 — 4 p.m. (IST)

YouTube Live Link:
https://youtube.com/live/KDjk_wRts38?feature=share