



Maryam Mohaghehtabar

Research Scholar, Psychology

Bio

BIO

I am a researcher with a PhD in Mathematics working at the intersection of mathematical modeling, machine learning, and medical data analysis. My research focuses on developing interpretable, stable, and mathematically grounded models for complex biomedical data.

My background includes work on large-scale biomedical datasets, including cancer and brain imaging data, where I focused on two core foundations of model design: (i) regularization, to improve stability, reduce overfitting, and incorporate the intrinsic structure of the data; and (ii) convex optimization, to ensure well-behaved optimization landscapes with globally optimal and computationally tractable solutions.

Currently, I apply mathematical modeling and machine learning methods to the analysis of functional magnetic resonance imaging (fMRI) data.