

Contribution Statement

Multi-output machine learning for ADHD and sex prediction using functional MRI and behavioral data

Mushaer Ahmed^a, Neha Chaudhary^b, Pooja Pandit^b, Partha Vemuri^b

^aDepartment of Industrial and Systems Engineering, University of Arizona, Tucson AZ

^bCollege of Information Science, University of Arizona, Tucson AZ

Mushaer Ahmed: Conceptualization, Model development, Feature based model selection, Cross validation, Testing, Writing- Original draft, Writing - Review & Editing

Neha Chaudhary: Conceptualization, Data preprocessing, Imputation, Exploratory data analysis, Data visualization, Writing- Original draft

Pooja Pandit: Conceptualization, Model development, Principal component analysis, Cross validation, Testing, Writing- Original draft, Writing - Review & Editing

Partha Vemuri: Exploratory data analysis, Writing- Original draft

*For coding part, specific contribution is mentioned in the markdown portion before each code chunk which can be found here: github.com/panditpooja/WiDS_Datathon_2025