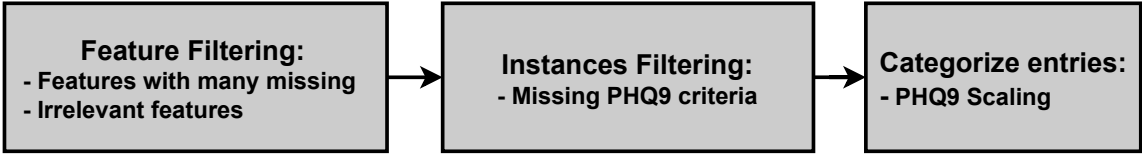
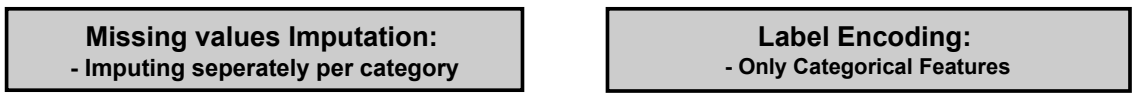


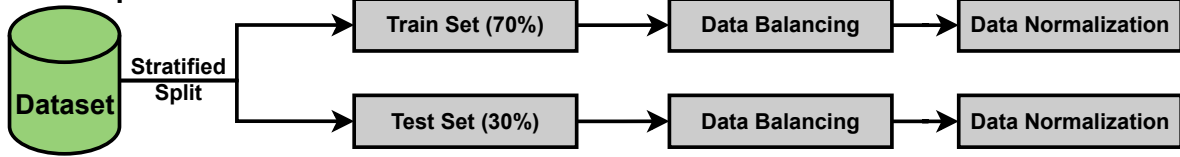
Feature engineering



Data Preprocessing

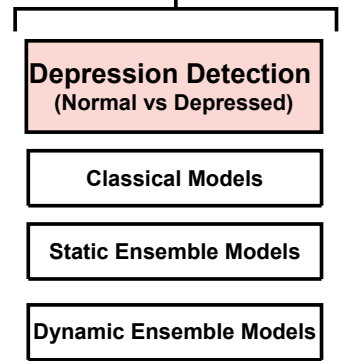


Data Preparation

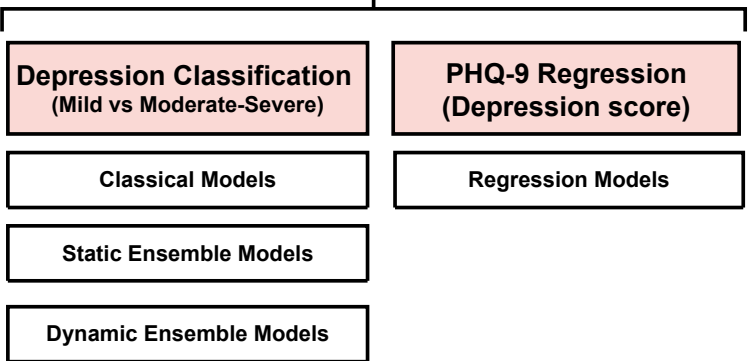


Machine learning Models

Stage 1: Depression detection

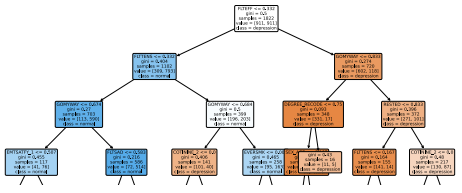
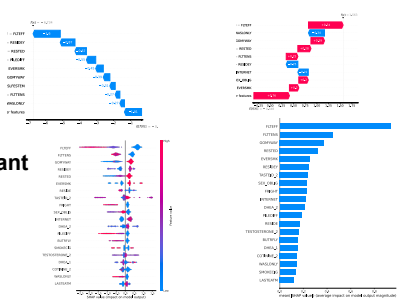


Stage 2: Severity prediction



Explainable AI

SHAP Feature Important
Global XAI
Local XAI



Decision tree based XAI

Evaluation: Models and XAI

Normal Patient
or
Depressed patient

