

**Project title:** Automated model selection and hyperparameter optimization using Bayesian optimization:  
Enhancing Machine learning models

**Team members:**

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[GitHub](#)

**Phase 2: Pre-processing**

**Steps followed:**

1. **Data Cleaning:** Handle missing values using imputation or removal. Removing duplicates and irrelevant features.
2. **Feature Engineering:** Scale or normalize features, Encode categorical variables
3. **Train-Test Split:** Split the dataset into training, validation, and testing sets (70-20-10)
4. **Exploratory Data Analysis (EDA):** identifying patterns, correlations, and outliers
5. **Defining the Search Space for Hyperparameters:**