

Week 10: Data Science Healthcare Project

Name: Serhat Uğur

E-mail: ugur.serhat@outlook.com

Country: Turkey

University: Anadolu University

Specialization: Data Science

Problem Description

One of the challenges for all pharmaceutical companies is to understand the persistence of drugs as per the physician's prescription. To solve this problem, ABC Pharma Company approached an analytics company to automate the identification process.

GitHub Repo Link: <https://github.com/serhatugur/data-science-internship>

Final Recommendation

The main goal of this analysis is to predict the persistence of patients as accurately as possible and provide actionable recommendations for improvement. The following steps outline the approach taken and the proposed next steps:

1-Model Development and Validation

This project will implement several machine learning models, such as logistic regression, random forest, and gradient boosting, to find reliable predictions.

2-Model Evaluation

Key performance metrics such as accuracy, precision, recall, F1-score, and AUC-ROC will be used for model comparisons. The most effective model will be chosen by balancing predictive power and interpretability.