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Telecom Churn Prediction Using Machine Learning

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Abstract: *Telecom churn prediction is a critical task for telecom companies to retain their customers. Churn refers to the phenomenon where a customer discontinues their subscription or service with a telecom company. Predicting churn helps telecom companies take proactive measures to prevent churn by identifying potential churners and offering them attractive retention strategies. This abstract presents an overview of the telecom churn prediction problem using machine learning techniques. The telecom churn prediction problem involves analyzing historical customer data, including demographic information, usage patterns, billing details, and service history, to predict whether a customer is likely to churn in the future. Machine learning algorithms are used to learn patterns and relationships from this data and make predictions based on new, unseen data. Telecom churn prediction using machine learning involves preprocessing historical customer data, feature engineering, selecting appropriate machine learning algorithms, evaluating model performance using various metrics, and deploying the best-performing model in a production environment. By implementing this process, telecom companies can reduce churn rates and improve customer satisfaction.*

Keywords: Machine Learning, Random Forest ,Decision Tree, XGBoost, Prediction, Churn

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