## Telco Customer Churn Prediction with Machine Learning

\*\*A successful churn prediction model can help you take proactive measures and prevent customer churn by predicting the risk of your customers leaving the company in advance.

In this article, I would like to share a study I did on Telco customer churn dataset. In this study, I used the LightGBM model to predict the probability of customers leaving the company.

\*\*Data Set:\*\*

\* It consists of 21 variables belonging to 7043 customers.

\* It contains information about customer service, account and demographic information.

\*\*Modelling:\*\*

\* I tried different machine learning models.

\* LightGBM model gave the best result.

\*\*Success of LightGBM Model:\*\*

\* Accuracy: 87

\* AUC: 93

\* Recall: 89

\* Sensitivity: 86

\* F1 Score: 87

\*\*Conclusion:\*\*

The results obtained show that the LightGBM model is quite successful for churn prediction. This model can help to develop various strategies to reduce the churn rate.

🫂Thank you:

I would like to thank Miuul, my trainer Vahit Keskin, my mentors Çağla Öztürk, MSc., Oğuzhan Arı, Nermin Babalik, Günal Hınçal, Berivan Ülger Vatansever and Ebubekir Tosun for their contributions to the completion of this training. 🪄♻️

\*\*For more information:\*\*

\* Data set: [https://www.kaggle.com/datasets/blastchar/telco-customer-churn](https://www.kaggle.com/datasets/blastchar/telco-customer-churn)

\* Codes: [https://github.com/](https://github.com/)

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