

# Hasan H. Yurdagül

## Curriculum Vitae

Kahramanmaraş / Turkey  
bytewaiser@gmail.com  
Website  
Github  
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Kaggle

### WORK EXPERIENCE

#### Unsped Customs Consultancy

##### Lead Machine Learning Engineer

SEPT. 2021 - PRESENT  
ISTANBUL/TURKEY

- To score and grade leads with the best client match, modeled the present data with **classification and regression** algorithms
- Modeled the present data with **regression** algorithms to calculate the customer lifetime value and customers' total spending
- The work done has let the company earn the funds provided to **cut 75% of expenses**

#### OxyAI

##### Lead Machine Learning Engineer

MAY. 2021 - PRESENT  
ISTANBUL/TURKEY

- Working on an image and text-based deep learning recommender system for the firm **Collecteurs** to recommend art pieces based on user's likes and traits
- Implemented a **collaborative filtering** based audiobook **recommender system** for the **Dinlebi** which **reduced the user churn rate by 35%**
- Reinforced in-use chatbots by implementing a **Turkish sentiment classifier and sentence similarity algorithms** with **Bert**

#### Universal Software

##### Lead Research Scientist

APR. 2021 - PRESENT  
ISTANBUL/TURKEY

- Implemented a time series forecasting pipeline using **Arima and Sarima** algorithms to forecast monthly electricity demand
- Implemented a time series forecasting pipeline with **LSTM** for **ISKI** to forecast the daily water consumption amount in Istanbul
- Developed a sentiment classifier using **TF-IDF** integrated classification pipelines to reinforce the in-use CRM system

### CONSULTANCY EXPERIENCE

#### Datadok

##### R&D Center Consultant

JAN. 2022 - PRESENT  
ISTANBUL/TURKEY

- Leading the data team to create **anomaly detection and customer segmentation** pipelines with **clustering** algorithms
- Leading the data team in developing an **association learning integrated recommendation engine** to find the best possible sales strategies for the companies and stores

#### Nano Works

##### R&D Center Consultant

JAN. 2022 - PRESENT  
ISTANBUL/TURKEY

- Leading the research team in implementing a call center forecasting software to predict future received call counts and average call handling times based on previous occurrences of the data

#### Albert Solino

##### R&D Center Consultant

APR. 2021 - PRESENT  
ISTANBUL/TURKEY

- Leading the data science team to design and develop a **churn analysis** service that finds the best match between employees and the leads to reduce the churn rate of the customers

#### Kolaybi

##### R&D Center Consultant

JAN. 2022 - PRESENT  
ISTANBUL/TURKEY

- Educating the team of software engineers to in the area of data science and machine learning
- Leading the team of software engineers to create and design a **deep and machine learning based time series** forecasting software as a service

#### Synopsis Technology

##### Data Science Consultant

NOV. 2021 - PRESENT  
ISTANBUL/TURKEY

- Leading the team of software engineers to create and design a **deep and machine learning based time series** forecasting software as a service
- The work done has let the company earn the funds provided to **cut 75% of expenses**

#### Smartiks Software Inc.

##### Data Science Consultant

DEC. 2020 - PRESENT  
ISTANBUL/TURKEY

- Led the team of senior data scientists to design and implement a **time series** forecasting desktop application with **deep and machine learning** algorithms
- The work done has let the company earn the funds provided to **cut 75% of expenses**

Protel  
Data Science Consultant

AUG. 2021 - APR. 2022  
ISTANBUL/TURKEY

- Educated the data science team of five in the area of **time series forecasting**
- Led the data science team of five in creating forecast pipelines to predict the future sales of different stores and products

Teknorot Automotive Products Inc.  
Data Science Consultant

AUG. 2020 - NOV. 2021  
DÜZCE/TURKEY

- Designed and created a **hybrid supervised modeling** service that uses **time lags and data features** to forecast sale amounts on different demanded products internationally

Comdata Group  
R&D Center Consultant

MAY. 2020 - SEPT. 2021  
ISTANBUL/TURKEY

- Developed an AutoTimeSeries modeling software that used **deep learning based time series** algorithms in forecasting received call count and average call handling time to optimize call center work schedule
- Integrated a **Deep Auto-Encoder** architecture to **detect and modify data outliers and anomalies** before forecasting the future values, which helped to achieve more accurate results

Hepsi Emlak  
R&D Center Consultant

SEPT. 2021 - MAY. 2022  
ISTANBUL/TURKEY

- Wrote the funding proposal for a recommender system with **Matrix Factorization based deep learning** algorithms to recommend adverts based on users' past interests
- Wrote the funding proposal for an image classification project which is based around **CNNs and Vision Transformers** to showcase the images of adverts based on users' interests while searching for the new houses

Sefamerve  
Data Science Consultant

AUG. 2020 - OCT. 2021  
ISTANBUL/TURKEY

- Created a time series forecasting pipeline using **LSTM with a relevant image similarity algorithm** to forecast the future demand of newly produced products

Gtech Technology  
Data Science Consultant

MAY 2020. - SEPT. 2021  
ISTANBUL/TURKEY

- Led the team of Senior data scientists to build a **demand forecasting system** for eCommerce sites to maximize their profits
- Taught a course on time series modeling with **LSTM, RNN, MLP, and CNN** algorithms and supervised learning with **XGBoost and SVM** algorithms

## EDUCATION

2016 – 2021 **Bachelor of Engineering**  
Computer Engineering  
Çukurova University

## PUBLICATIONS

1. **Hasan H. YURDAGÜL**, Hatice ÖZDEMİR, Kenan ALAN, Adem SELLER, M. Fatih AKAY, and Sevtap ERDEM, "Water Consumption Forecast Models Using Time Series Based Deep Learning Methods," in 5. INTERNATIONAL CONFERENCE ON LIFE AND ENGINEERING SCIENCES, 978-605-70978-3-5, 2022, pp. 1–215.
2. M. Ballouch , F. Akay , S. Erdem , M. Tartuk , T. Nurdağ ve **H. Yurdagül** , "Forecasting Arrivals to a Call Center Using Supervised Machine Learning", International Conference on Interdisciplinary Applications of Artificial Intelligence (ICIDAAI'21) May. 2021, Yalova, TURKEY
3. M. Ballouch , F. Akay , S. Erdem , M. Tartuk , T. Nurdağ ve **H. Yurdagül** , "Forecasting Call Center Arrivals Using Machine Learning", Osmaniye Korkut Ata Üniversitesi Fen Bilimleri Enstitüsü Dergisi, c. 4, sayı. 1, ss. 96-101, Mar. 2021

## SKILLS

BEGINNER	Rust, Haskell, Go
INTERMEDIATE	C/C++, Javascript, Lua
EXPERT	Linux, Python, Tensorflow, Keras, PyTorch, Scikitlearn, Numpy, Pandas

## REFERENCES

### Prof. Dr. Mehmet Fatih Akay

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EMPLOYER	Department of Computer Engineering Çukurova University
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### Kenan Alan

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