



Kadriye Tuba TURKCAN KARACA

MACHINE LEARNING ENGINEER | POWERCODERS PARTICIPANT

PROFILE

Data-driven Machine Learning Engineer, fully proficient in Python with a problem-solving mindset and analytical approach to tasks. Highly adept at **clustering & classification, data analysis & visualization** to increase business efficiency. Eager to gain more experience in **ML Techniques & Algorithm development** to solve real-world problems.

IT SKILLS

★★★★★	ADVANCED	PYTHON, PANDAS, NUMPY, SCIKIT LEARN, EDA, DATA VISUALIZATION, REGRESSION, CLUSTERING, CLASSIFICATION
★★★★☆	INTERMEDIATE	PARALLEL COMPUTING, SQL, POWER BI, TIME SERIES / CHURN / BASKET / RFM ANALYSIS, CUSTOMER SEGMENTATION
★★★☆☆	BEGINNER	HTML, CSS, JAVASCRIPT, MEDICAL IMAGE COMPUTING

CONTACT & PERSONAL

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🌐 [LinkedIn](#) [GitHub](#)

Turkish (PERMIT B) 17.06.1985

WORK EXPERIENCE

05/2022 - 08/2022

REMOTE DATA SCIENTIST INTERN / PERGAMO , GERMANY

- Collaborated in team of 6 interns to analyze the data and predict future sales
- Conducted EDA in Jupyter Lab and data visualization using PowerBI dashboards
- Implemented Time Series Analysis and forecast using SARIMA and STL
- Developed Customer Segmentation using K Means Algorithm and RFM Analysis

09/2016 - 06/2018

MATH TUTOR / TIME ETUT MERKEZI / NESA ISTANBUL, TURKEY

- Assessed students' learning to determine learning weaknesses and needs, successfully helping students perform better in mathematics courses.
- Met with 30+ students weekly through online learning platforms or in a 1:1 setting at the tutoring center.

09/2013 - 06/2015

ASSISTANT DIRECTOR / FATIH UNIVERSITY GIRLS' DORMITORY, ISTANBUL, TURKEY

- Supervised foreign students in the dormitory to help them integrate into Turkey and university.
- Reduced their problems by analyzing their concerns and translating their needs to the dormitory director.

09/2008 - 09/2013

MATH TEACHER SIRIWAT / WICHAJ WITTAYA BILINGUAL SCHOOL, THAILAND

- Implemented effective student-centered instruction and built strong parent-teacher relationships.
- Adapted teaching and instructional methods to meet students' varying learning styles and preferences.

LANGUAGES

TURKISH	MOTHER TONGUE
ENGLISH	C1
GERMAN	A2
SPANISH	A1

PROJECTS

YELP RESTAURANT RATING

- Conducted Data Wrangling to clean messy data
- Created charts in Jupyter Lab to perform preliminary analysis & visualize data using Matplotlib, Seaborn and Folium
- Built Regression Models to achieve a higher accuracy score.

DAILY SALES FORECAST

- Conducted Time Series Analysis on the daily sales data of a restaurant.
- Applied the ADF Test to check the stationarity of the series.
- Diagnosed the model by plotting SARIMAX results.
- Applied STLForecast for forecasting future data.

AGE REGRESSION FROM BRAIN MRI

- Implemented Volume-Based Regression using brain structure segmentation, including gray matter (GM), white matter (WM), and cerebrospinal fluid (CSF)
- Utilized SimpleITK and Numpy to display brain MRI images.
- Implemented Gradient Boosting Regressor Method to increase accuracy.

KAGGLE BIKE SHARING PROJECT

- Gathered and analyzed data to forecast bike rental demand in the Capital Bikeshare program in Washington, D.C.
- Conducted Feature Selection and obtained the most important features using Random Forest Selector.
- Increased the accuracy score to 95% with the help of RandomForestRegressor.

HOBBIES

LEARNING AND APPLYING MACHINE LEARNING MODELS

It is amazing to see the performance of Machine Learning Models in real life.

HIKING ON SWITZERLAND'S MOUNTAINS

Switzerland is a beautiful country; my family and I love being a part of it.

MAKING APRICOT JAM & BAKLAVA

There's nothing quite like homemade apricot jam for me and Baklava with pistachio is my favorite dessert.

REFERENCES

HANY WASSEF,
LEAD COMPANY RELATIONS DCH
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EDUCATION

09/2022 - 12/2022

POWERCODERS - CODING ACADEMY FOR REFUGEES, BERN

- Foundations in HTML, CSS, JavaScript; specialization tracks upcoming
- Weekly business & social skills training (team work, communication, etc.)

01/2021 - 07/2021

FULL-STACK DATA SCIENCE CERTIFICATION PROGRAM / TECHPRO ED, ONLINE, USA

- Data Analysis & Visualization
- Tableau & Power BI, SQL
- Probability & Statistics
- Data Wrangling & Cleaning
- Machine Learning
- Deep Learning
- Business Use Cases (Customer Segmentation, CLTV Calculation, Churn Analysis)
- Time Series Analysis

09/2019 - 09/2021

MS DEGREE PROGRAM / COMPUTATIONAL SCIENCE AND ENGINEERING / ISTANBUL TECHNICAL UNIVERSITY, ISTANBUL, TURKEY

- Scientific Computing
- Parallel Computing
- Object Oriented Programming with C++
- Machine Learning
- Medical image Computing
- Computational Geometry

09/2013 - 06/2017

MS DEGREE / MATHEMATICS / ISTANBUL UNIVERSITY, ISTANBUL, TURKEY

- Numerical Analysis

09/2003 - 06/2008

BS DEGREE / MATHEMATICS EDUCATION / MIDDLE EAST TECHNICAL UNIVERSITY, ANKARA, TURKEY

- Linear Algebra
- Calculus
- Differential Equations
- Discrete Mathematics

VOLUNTEER EXPERIENCE

09/2013 - 01/2015

ASSISTANT IN FOREIGNERS' OFFICE / FATİH UNIVERSITY / ISTANBUL

- Mentored foreign students in integrating into the university and country.