

EMRE OKULAR

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EDUCATION

University of San Francisco

Master of Science in Data Science

San Francisco, CA

August, 2020 – August, 2021(expected)

- Relevant Coursework: Python, Data Structures and Algorithms, Statistics, Data Visualization, SQL, Machine Learning, Regression, Deep Learning, NLP, Time Series, Product Analytics, Design of Experiments, Distributed Computing (Spark)

Yildiz Technical University

Bachelor of Engineering in Computational and Applied Mathematics

Istanbul, TURKEY

September, 2012 – June, 2017

- Relevant Coursework: Linear Algebra, Calculus, Discrete Mathematics, Abstract Mathematics, Algorithms, Programming, OOP, Probability, Statistics, Data Management, Optimization, Cryptography, Computer Vision, Image Processing, AI

Graz University of Technology

Erasmus Exchange Program in Computer Science and Mathematics

Graz, AUSTRIA

October, 2014 – August, 2015

- Ranked 1st among the outgoing Erasmus Exchange Program students in the department and awarded EU Scholarship.

WORK EXPERIENCE

Data Science Intern

Dictionary.com

January, 2021 – Present

Oakland, CA

- Predicting click-through rate (CTR) with random forest classifier trained on website logs and cookies. Increased model accuracy by 5% using sampling and feature engineering techniques in scikit-learn pipelines.
- Identifying most engaged user segments by exploring website behavior to gain insights for improving the ad auction.
- Performing exploratory analysis and forecasting on ad impressions to uncover the relationship between inner and ad clicks.

Software Engineer

Turkcell

August, 2017 – October, 2020

Istanbul, TURKEY

- Achieved the ability to analyze streaming data in real-time and take immediate actions through outbound communication channels by developing real-time streaming data analytics systems with Lean-Agile Methodologies.
- Expanded event-based scenarios such as gamification, anti-churn, up-sell, and retention resulted in a 15% increase in annual revenue by integrating big data sources into complex event processing systems.
- Increased monthly bundle package sales by 15% discovering customer's opinions from inbound messages in SMS channels with NLP techniques such as named entity recognition, sentiment analysis, and text classification.
- Developed the capability of sending millions of messages and notifications per day by building highly scalable campaign management applications with Java, PL/SQL, and Python using best practices for software development lifecycle.
- Empowered the marketing team to derive strategic insights for campaigns by creating a high-performance synchronous Java REST service for collecting and storing push notification responses in the Oracle SQL database.
- Automated generating the daily campaign report for all channels using a vast amount of relational data with tuned SQL queries and PL/SQL procedures.

Data Science Intern

EVAM Streaming Analytics

February, 2017– May, 2017

Istanbul, TURKEY

- Explored streaming ML algorithm papers and identified algorithms to implement by understanding business needs.
- Enabled real-time clustering and anomaly detection features on streaming data by implementing density-based streaming clustering algorithm DenStream into the core product with Java.

DevOps Intern

Anadolu Insurance

June, 2016 – July, 2016

Istanbul, TURKEY

- Improved the software lifecycle by creating automated DevOps pipelines with build, test, and deploy stages with Jenkins.

PROJECTS

Cancer Classification by Liquid Biopsy

Achieved 73% accuracy and placed in the top 10 in Kaggle private leaderboard. Fit and tuned various scikit-learn classifiers such as boosting and PyTorch deep neural networks applying regularization techniques to predict multi-class cancer types.

ML algorithm implementations from scratch in Python

Regularized Linear and Logistic Regression with Gradient Descent, Naive Bayes, Decision Trees, Random Forest, K-means Clustering, Boosting, Deep Neural Networks, CNN, RNN, recommendation engine, and automated feature selection algorithms.

Ad Click Prediction

Predicted ad clicks from KDD Cup dataset achieving 83% accuracy. Various classifier models, including tree-based ensemble methods used in scikit-learn pipelines applying feature selection, preprocessing, and tuning techniques with cross-validation.

TECHNICAL SKILLS

Python (Pandas, Scikit-learn, NumPy), PyTorch, Java, R, SQL, NoSQL, Spark, Kafka, Linux, Git, Docker, AWS, Jenkins