# EMRE OKCULAR

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## **EDUCATION**

#### **University of San Francisco**

San Francisco, CA

Master of Science in Data Science

August, 2020 – August, 2021(expected)

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

### **Yildiz Technical University**

Istanbul, TURKEY

Bachelor of Engineering in Computational and Applied Mathematics

September, 2012 – June, 2017

• Relevant Coursework: Linear Algebra, Calculus, Discrete Mathematics, Abstract Mathematics, Algorithms, Programming, OOP, Probability, Statistics, Data Management and File Structures, Optimization, Cryptography, Operations Research, Computer Vision, Image Processing, AI

### **Graz University of Technology**

Graz, AUSTRIA

Erasmus Exchange Program in Computer Science and Mathematics

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** 

January,  $\overline{2021 - Present}$ 

Oakland, CA

Dictionary.com

- Predicting click-through rate (CTR) with random forest classifier trained on website logs and cookies. Increased model accuracy by 5% using feature engineering techniques.
- Identified most engaged users by exploring user website behavior to gain insights for improving the ad auction process.

### Software Engineer

August, 2017 – October, 2020

Turkcell

Istanbul, TURKEY

- Built highly scalable campaign management applications with Java, PL/SQL, and Python for the direct marketing team to be capable of sending millions of messages per day.
- Developed real-time streaming analytics systems with Lean-Agile Methodologies. Gained the ability to analyze streaming data in real-time and to take immediate actions with outbound communication channels.
- Increased monthly bundle package sales by 15% discovering customer's opinions with text classification techniques in SMS channels.
- Created a high-performance synchronous Java REST service for collecting and storing push notification responses in the SQL database to derive insightful metrics for the marketing team.
- Enabled event-based scenarios such as gamification, anti-churn, and retention for business teams by integrating data sources to complex event processing systems.

### **Data Science Intern**

February, 2017 – March, 2017

**EVAM Streaming Analytics** 

Istanbul, TURKEY

- Explored streaming ML algorithm papers and identified algorithms to implement after understanding business needs
- Enabled real-time segmenting ability, including outlier detection for client use cases by implementing density-based streaming clustering algorithm DenStream to the product with Java.
- Performed tests with data from different clients as R&D processes with R, Python, Java, Apache Spark, and MOA.

#### **DevOps Intern**

June, 2016 – July, 2016

Anadolu Insurance

Istanbul, TURKEY

• Collaborated with the DevOps team to develop automated pipelines with Jenkins for application lifecycle management.

### **PROJECTS**

## • Cancer Classification by Liquid Biopsy

Achieved 73% average accuracy with 21 different models and placed in the top 10 leaderboard in Kaggle. Fit various scikit-learn classifiers and PyTorch neural networks to predict multi-class cancer types by identifying top features.

• ML algorithm implementations from scratch in Python

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

• Ad Click Prediction

Predicted ad clicks from KDD dataset with different classifier models in scikit-learn pipelines. Achieved 83% accuracy applying feature selection, preprocessing, and tuning techniques.

#### **TECHNICAL SKILLS**