

EMRE OKULAR

San Francisco, CA | 415 799 6601

emreokular@gmail.com | okular.com.tr | github.com/emreokular | [linkedin.com/in/emreokular](https://www.linkedin.com/in/emreokular)

EDUCATION

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- 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, Statistics, Data Visualization, SQL, Machine Learning, Regression, Deep Learning, NLP, Time Series, Product Analytics, Design of Experiments, Distributed Computing (Spark)
- 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, Optimization, Cryptography, 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

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- Data Science Intern** January, 2021 – Present
Dictionary.com 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** August, 2017 – October, 2020
Turkcell 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 performant Java REST service for collecting 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** February, 2017 – May, 2017
EVAM Streaming Analytics Istanbul, TURKEY
• Explored streaming ML algorithm papers and identified algorithms to implement by understanding business needs.
• Enabled real-time clustering and anomaly detection on streaming data by implementing density-based clustering algorithm DenStream into the core product with Java.
- DevOps Intern** June, 2016 – July, 2016
Anadolu Insurance Istanbul, TURKEY
• Improved the software lifecycle by creating automated DevOps pipelines with build, test, and deploy stages with Jenkins.

PROJECTS

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- **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.
- **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.
- **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, SciPy), PyTorch, Java, SQL, NoSQL, Spark, Kafka, Linux, Git, Docker, AWS, Jenkins