SUKRU HAN SAHIN

Email: sukruhansahin@gmail.com
Phone: +45 50 23 42 59
Address: Lyngby, Denmark
linkedin.com/in/sukruhansahin
github.com/github.com/SukruHan

EDUCATION

Technical University of Denmark (DTU)

M.Sc. Human-Centered Artificial Intelligence

Lyngby, Denmark 2019–2021

Bogazici University

Istanbul, Turkey 2015–2019

B.Sc. Industrial Engineering, GPA: 3.18/4.00, Honors Degree

- Thesis: "Predicting Conversion Rate of An FMCG Company's Users for Online Marketing Incentives"
- Erasmus/Exchange: Attended Erasmus Programme in Technical University of Denmark between the dates of January 2018–June 2018

EXPERIENCE

Novo Nordisk

Bagsværd & Hillerød, Denmark February 2019–Ongoing

Data Science Intern at Supply Chain Analytics

- Process Duration Prediction Project:
 - * Retrieving data via Microsoft SQL and wrangling production site data with Alteryx or Pandas in order to obtain correct from of data and visualizing using Plotly, Matplotlib, Bokeh, Folium, Seaborn packages or directly from Tableau. Creating validation points to find out data errors and reporting cleaning these errors. Adding features and analyzing enriched data to retrieve valuable insights to make business decisions. Deploying machine learning algorithms using Sklearn in order to predict process duration to help planning.
- Optimizing Sourcing Operations Project:
 - * Applying mixed integer nonlinear programming model (MINLP) with Pyomo and NLopt packages using Python for the optimization of 'lot size' and 'frequency' variables. Creating an interface using Tkinter GUI to make it user friendly and creating an .exe file in order to make product independent of any programming language. As a result, designing a product for the optimization process of purchasing raw materials.

Data Science Intern at Manufacturing Intelligence

- People Counter Project:
 - * For detecting and tracking people in a room, Multi-object Detection & Tracking APIs in OpenCV used first in Python then in C++ as well. Parameter tuning and model comparison methods are applied to find best model. Openpifpaf package is used for Pose Estimation again for detecting and tracking people in a room. Pre-trained model results are improved via parameter tuning.
- Robot Automation Project:
 - * Automating communication connection among main station, CT Scanner and Robot arms using Python socket. Programming robot and RPA tool to organize work load.

Vodafone

VAS & Messaging Product Management – Discover Attendee

Summer 2019

- Competitor Analysis:
 - * Analyzing and comparing the product portfolio of competitors regarding corporate marketing products. Developing new product ideas and deciding over implementation, segmentation, pricing strategies.

Procter & Gamble

Data Scientist Intern (Bachelor's Thesis)

Istanbul, Turkey January 2019–June 2019

- Predicting Conversion Rate of An FMCG Company's Users for Online Marketing Incentives:

* Creating data tables properly in order to apply ML algorithms. Using classification algorithms (Logistic Regression, Penalized Logistic Regression, Random Forest, XGBoost) in order to predict accurately conversion rate of each consumer. Evaluating accuracy parameters (AUC, Balanced Accuracy, Sensitivity) of each algorithm according to different sampling methods and selecting the most efficient algorithm with the most appropriate sampling method to come up with a solution.

PricewaterhouseCoopers (PwC)

Istanbul, Turkey

Consulting Intern November 2018–December 2018

- Bank Card Schemes Project:

* Increasing the market penetration focusing on specific segments. Analyzing status quo via conducting market research on strategies, behaviors, roles, campaigns, goals and products of competitors and worldwide players with business database and knowledge experts. • Constructing and developing strategies upon the outputs of analysis.

Unilever
Supply Chain ULIP Intern
Summer 2018

- Digital Supply Chain Transformation Project:

* Creating "Data Validation Module" via organizing meetings with specialist and consultancy firm. For the "Demand Planning Module", analyzing Unilever's and its competitors' activity logs for categorizing, matching and comparing synthesized data to obtain more accurate forecasts. Originate, perform analysis for the current process of project for all Supply Chain organization.

Mosek ApS
Copenhagen, Denmark
Optimization Analyst
March 2018–June 2018

- Developing Optimization Models & Testing Software:

* Developing convex optimization models; Portfolio Optimization and Flow Interdiction problems. Coding developed model in the environment of MOSEK Fusion API using Python. Testing designed model with real data, evaluating results in sense of mathematical modelling solutions.

Mondelez International

Istanbul, Turkey

Sales Strategy & Operations Intern

July 2017–September 2017

- Analysis and Idea Generation:
 - * Analyzing Optimal Point of Sales of Oreo according to different market parameters and firm data using Excel. Exploring and eliciting strategies to increase sales of First gums in terms of idea generation. Conducting a market research to crosscheck resolutions. Presenting results to department.

Sampa Automative Inc.

Samsun, Turkey

Product Development Intern in R&D

January 2017–February 2017

- Testing and Analysis of Products:
 - * Responsible intern for the development project of two Truck Trailer parts. Testing parts at MTS Unit (Durability and Endurance Simulation Test) for different parameters. Improving better prescriptions according to laboratory tests and testing at MTS Unit again.

SKILLS

- Technical Skills: Python, C++, SQLite, Alteryx, Tableau, MS Office, R, Machine Learning, Deep Learning, Semantic/Sentiment Analysis, Time Series Analysis, Network Analysis
- Interests: Strength Training, Taekwon-do (RedBlack Belt), Tennis, Debating

LANGUAGES

• English: Business Proficiency

- **IELTS:** 7/9

• Turkish: Native

• Danish: Interested in

PROJECTS

See full list of projects on github.com/SukruHan

• Detecting The Odd-One-Out Among Words With Embeddings

Comparing the performance of different word-embedding models in order to detect the outlier within a small group of words.

Python, Gensim, FastText,
 SPARQLWrapper, Sklearn, Wembedder

github.com/SukruHan/AdvancedMachineLearning

• Time Series Analysis for Sales Data

Statistical analysis and Time Series models application on Sales Data. Prediction for next window is created.

- Python, Statsmodels, Pmdarima, Scipy

github.com/SukruHan/Time_Series_Analysis

• Game of Throne Analysis

Network Analysis, Community Detection is executed for characters and houses of show. Text and Sentiment Analysis is conducted with Twitter data.

Python, Nltk, Wordcloud, Networkx

github.com/SukruHan/simonpetersen.github.io

Predicting Ozone Level

Data exploration, visualization and machine learning models application for LA Ozone data.

- Python, Sklearn, Seaborn, Torch

github.com/SukruHan/Introduction_to_Machine_Learning

• Deep Learning for Popular Datasets

Various deep learning models (FFNN, CNN, RNN, AutoEncoders, Q-Learning for RL) are practiced for different popular datasets.

- Python, Torch, Math, Scipy

github.com/SukruHan/Deep_Learning

• COVID-19 Analysis & Comparison with Previous Pandemics

Visualizing virus spreads and effects, Predicting future cases.

- Python, Bokeh, Folium, Geopy, Sklearn,

github.com/SukruHan/SocialDataFinalProject

Data Engineering for Airbnb

Using Spark to analyze data obtained from the Airbnb's website. Learning about trends and usage patterns from the data. Then detecting reviews that are the most positive.

 Python, PySpark, Matplotlib, Scipy, Re, Seaborn

github.com/SukruHan/Computational_Tools_for_Data_Science

SCHOLARSHIPS AND AWARDS

• Turkish Educational Foundation - Garring Foundation Scholarship	2019 – 2021
• Deloitte Educational Foundation Scholarship	2017 – 2019
• Outstanding Delegate Reward at Model United Nations Competition at Kadir Has University	2016

Extracurricular Activities

- Member at Young Professionals in Denmark (Representing DTU)
 Member of the Young Professionals in Demark. YPD is a career development network for international students. The programme is a leading study and career destination, which promotes Danish business and culture to students
- Leader at Boğaziçi University Consulting (BUCO)

 Leading several projects to solve real problems of firms or organizations. Car Leasing firm, Sports Club and Inflight

 Entertainment firm are among the participants.
- Board Member & Trainer at Bogazici University Management Consulting Committee (BUMCC) 2017–2019

 Board Member and Trainer at the committee. Training students about case interviews and consultancy sector and making strategic decisions about the future of the committee.
- Scholar at Deloitte Educational Foundation (DEVAK)

 Beside supporting financially, DEVAK provided weekly educational seminars to build scholars as all-rounders.