MERT KOŞAN

PH.D. STUDENT

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WORK EXPERIENCE

> Ph.D. Intern Data Scientist - Visa Research Fraud Detection and Profiling

🛗 June 2020 - August 2020

Austin, USA

- Developed a framework that generates profiling and recommend optimized strategies for near-real time unsupervised fraud detection on graphs.
- The proposed framework profiles the fraud automatically and accurately less than a second with a small number of transactions.

> Part-time Software Engineer - Proente **Industry 4.0 Solutions at Factories**

🛗 June 2017 - August 2018

◊ Istanbul, Turkey

• Developed a software application that generates reports and statistics on data collected by Prowmes.

> Intern Software Engineer - Robert Bosch GmbH **Automotive Industry**

June 2016 - August 2016

♥ Plochingen, Germany

• Designed a software application generating workshop reports on data collected by ESI [Tronic] 2.0.

TEACHING EXPERIENCE

Co-designer/Instructor - UC Santa Barbara Machine Learning Workshops | Python

May 2019 - June 2019

Santa Barbara, USA

• Helped the students, from A Self-Organized PhD Students Exchange Program by Junior Nanotech Network, by teaching them machine learning methods for their projects.

> Teaching Assistant - UC Santa Barbara

Data Structures & Algorithms | C++, Python

September 2018 - April 2019

Santa Barbara, USA

• Discussion sections | Supervision of class project

> Co-designer/Instructor - Sabanci University

Enhancement Workshops for Computer Science

January 2018 - June 2018

- Aimed for a quality enhancement of the students' knowledge about Computer Science.
- Created workshops and instructed Computer Science related courses (Git, Linux, Gcc, Python etc.).

> Teaching Assistant - Sabanci University

Database Systems & Operating Systems | MySQL, C++, Java

February 2016 - May 2017

♀ Istanbul, Turkey

• Lab materials | Supervision of class project

SKILLS & HOBBIES

- Programming: Python, C++, Java, Javascript, SQL
- Tools: Neo4j, Git, LaTeX, Office, MySQL
- Languages: Turkish (native), English (fluent), Spanish (beginner)
- Personal: Result-oriented | Responsible | Hardworking
- Hobbies: Football | Strategy Games | Chess | Snooker

EDUCATION

> Ph.D. in Computer Science

University of California at Santa Barbara

2018 - Present

Santa Barbara, USA

Advisor: Prof. Ambuj K. Singh | GPA: 4.00 Research Area: Network Science, Data Mining, **Machine Learning**

> B.Sc. in Computer Science

Sabanci University

2013 - 2018

GPA: $3.99 \mid 1^{st}$ ranked

SELECTED PROJECTS

> Event Detection on Dynamic Networks

In Submission, 2020

• Proposed an event detection framework for dynamic graphs using Graph Convolutional Networks tested on multiple datasets.

> Bike Sharing

September 2018 - December 2018

· Designed and implemented a bike sharing rebalancing problem using a network flow ap-

> Impact Measurement of Tweets

diam't October 2017 - June 2018

• Measured the hidden impact of a tweet by detecting copy-pasted or referenced tweets which are named as "Hidden Retweets" by Dr. Arin.

▶ Differential Privacy Framework for **Movie Recommendation System**

Example 2016 - September 2017

• Proposed and implemented a movie recommendation system that utilize differential privacy framework which guarantees the privacy of the individual user ratings without losing the utility of the data too much.

> CryCur

🗎 January 2017 - May 2017

• Created a command line tool introducing helpful functionalities for crypto-currency applica-

Economics and Terrorism

🛗 January 2017 - May 2017

• Used data science techniques to show a relation between economic prospects of the countries and terrorist incidents. These economic prospects include GDP, foreign capital investments etc.