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#### **Education**

**Koc University** Istanbul, Turkey

**B.S. COMPUTER ENGINEERING** 

Oct. 2016 - Exp. May. 2021

Related Coursework: Algorithms & Complexity, Computer Networks, Parallel Programming, Modern Cryptography

Koc University Istanbul, Turkey

B.S. ELECTRONICS ENGINEERING DOUBLE MAJOR

Oct. 2015 - Exp. May. 2020

• GPA 3.80 / 4.00 | Received 100% scholarship which is given to top 300(%0.01) among 2 million students.

#### **Technical University of Munich (TUM)**

Munich, Germany

**EXCHANGE STUDENT WITH ERASMUS+ FULL GRANT** 

Apr. 2020 - Sept. 2020

• Related Coursework: Internet-scale Distributed Systems, Machine Learning for Computer Vision, Blockchain-based Systems

#### Nanyang Technological University (NTU)

Singapore

**EXCHANGE STUDENT WITH FULL-SCHOLARSHIP** 

Aug. 2019 - Dec. 2019

• Related Coursework: Artificial Intelligence and Data Mining

# **Research & Teaching Experience**

#### **Network and Distributed Systems Laboratory, Koc University**

ADVISOR: PROF. ÖZNUR ÖZKASAP

Jan. 2019 - Jun. 2019

- Worked on Skip Graph project which is used for blockchain and distributed system simulations.
- Developed Java implementations and test cases for node search and availability algorithms.

#### **Stanford University CS Bridge Program**

SECTION LEADER | LECTURER: PROF. NICK McKeown

Summer 2017 - Summer 2018

• Helped 50+ high school students with their first experience in programming each year. Conducted laboratory sessions.

#### **Koc University**

TEACHING ASSISTANT | INTRODUCTION TO PROGRAMMING

Jan. 2017 - Jun. 2018

• Prepared and graded assignments, conducted problem solving sessions for Introduction to Programming course.

#### **Koc University Arcelik Research Center for Creative Industries**

ADVISOR: PROF. M. CENGIZ ONBASLI

Oct. 2017 - May. 2018

- Built and deployed overall Internet of Things(IoT) project with Raspberry pi, camera, temperature and weight sensors.
- Developed native mobile application for Android.
- Used machine learning algorithm for food recognition and several AWS stack including Recognition, S3, DynamoDB and Lambda.
- Worked on a research about applications of wearable technologies in gamification and prototyped a hand controller with Arduino and 3D Printing.

# **Advanced Course Projects**

#### **Senior Design Project**

EYE DISEASE CLASSIFICATION SYSTEM

Oct. 2020 - Present

- Implementing Machine Learning algorithms that can classify cataract, glaucoma and diabetic retinopathy from fundus images.
- Designing overall scalable cloud system and preparing front-end, back-end sides of project

#### **Internet-scale Distributed Systems**

REVIEW PAPER: YCSB vs BIGBENCH

Apr. 2020 - Aug. 2020

- Prepared and presented a paper that compares Yahoo! Cloud Serving Benchmark(YCSB) and BigBench Benchmark tools.
- Read and discussed total of 30 papers about recent Distributed Systems Technologies during semester.

#### **Parallel Programming Course Project**

CARDIAC ELECTROPHYSIOLOGY SIMULATOR

Jan. 2019 - Jun. 2019

- Implemented 3 versions of cardiac electrophysiology simulator that uses MPI, OpenMP and Nvidia CUDA.
- Optimized mutli-core GPU performances of MPI ,OpenMP and Nvidia CUDA versions and prepared performance comparison report on different input scales.

NOVEMBER 19, 2020

#### **Software Engineering Course Project**

MULTITHREADED GAME WITH NETWORK

- Oct. 2018 Jan. 2019 • Developed an online game based on Ultimate Monopoly board game with a team of 5 people and acted as a team leader.
- Designed Network and Thread related parts of project and applied GoF desing patterns.
- Selected as the best project between 20 other projects by professor and TAs.

### **Fellowships**

#### Stanford University Hasso Plattner Institute of Design (d.school)

Stanford University & Remote

University Innovation Fellow

Oct. 2019 - Present

- Concluded a 7 week-long design thinking, innovation, and entrepreneurship online education.
- · Carried out campus-wide projects to advocate for lasting institutional changes to increase sustainability and creativity.

#### Global Learning and Leadership Program

Istanbul, Turkey

COFOUNDER OF KOC UNIVERSITY MAKERSPACE LAB

Sept. 2016 - Nov. 2019

- Funded by engineering faculty to design the space and chose the required tools after one year of pivot project.
- Coordinated team members and arranged workshops about computer science, creative skills, and social innovation.
- In Spring 2019, 40% of all senior engineering projects developed in fully student driven Makerspace.

**AIESEC** Cairo, Egypt

GLOBAL VOLUNTEER IN EGYPT

Summer 2015

• Was a member of an international team of 30 people which was responsible from building a school from throw-out materials such as plastic bottles, car tires in a poor island in Nile, Egypt.

### **Honors & Awards**

- Pixery Hackathon'19 Best Project Award, Ranked 1st among preselected 12 teams
- 2019 Ciceksepeti Hackathon'19 Best Project Award, Ranked 1st among preselected 30 teams
- 2018 Zeplin Hackathon Special Jury Award, Awarded as most enthusiastic team to learn new concepts and tools
- 2015 Ranked 273th among more than 2 million Students, Turkish University Attainment Exam
- Ranked 1th among more than 1 million Students, Turkish High School Attainment Exam

# **Work & Internship Experience**

Vagon.io Remote

**FULL-STACK SOFTWARE DEVELOPER** 

Mar. 2020 - Present

- · Working on Web and back-end applications using React, Ruby on Rails, PostgreSQL, AWS, Docker.
- Built an module that installs softwares on machine images and distributes them to 8 cloud regions.
- Improved live streaming service performance by 30% using websocket connection and browser decorder APIs.
- Increased fraud detection, prevention methods and changed payment systems. Monthly fraud cases decreased by 80%.

#### **Mozilla / Firefox Devtools**

Remote

**OPEN SOURCE CONTRIBUTOR** 

Jan.2020 - Mar. 2020

- Worked on Firefox projects, mainly on Firefox Devtools. Solved and reported issues on Github and Bugzilla (Phabricator).
- Created previewer that shows the visual content of website in timeline for performance recording tool Firefox Profiler.
- · Reworked Firefox reader mode design and integrated reader specific buttons to work with browser settings.

Zeplin.io San Francisco, CA & Istanbul

SOFTWARE DEVELOPER INTERN

Jun. 2019 - Aug. 2019

- Worked on React Web and Electron Windows applications and developed components that are used across all application.
- Migrated Profile Pages (Account settings, Billing, Subscriptions) to React JS from vanilla Javascript, HTML, CSS.
- Reduced code redundancy around 30% in Profile Pages and increased loading speed around 10%.

Trendyol.com Istanbul, Turkey

SOFTWARE DEVELOPER INTERN

Jul. 2018 - Dec. 2018

- Developed web services for seller interface of e-commerce application using Java Spring Boot, REST API, RabbitMQ.
- Implemented new microservice features to Seller Portal that are used for adding and tracking products in marketplace.

NOVEMBER 19, 2020