

DOGUHAN YEKE

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EDUCATION

Purdue University, USA

June 2021 - ∞

Ph.D, Department of Computer Science

Middle East Technical University(METU), Turkey

June 2017 - July, 2020

M.Sc, Department of Computer Science

4.00/4.00

Middle East Technical University(METU), Turkey

September 2013 - June 2017

B.Sc, Department of Computer Science

3.24/4.00

WORK EXPERIENCE

Department of Computer Engineering in METU, Turkey

August 2018 - Ongoing

Teaching and Research Assistant

- CEng489: Introduction to Computer Security: assignments about AES-RSA encryption, sql attacks and basic firewall construction.
- CEng302: Database Management Systems: database design, postgresql, indexing etc.
- CEng331: Computer Organization: sequential and pipelining using x86-64 instruction set
- CEng350: Software Engineering: UML and system design
- CEng230: C programming: C exercises in lab

Comodo, Turkey

June 2017 - August 2018

Software Developer

- Worked as a Backend Developer, used different tech stacks like Flask, Express, Javascript, Relational Databases, REST APIs, AWS and testing etc.

SAP Development Center, Turkey

June 2016 - September 2016

Student(Intern) Software Developer

- Worked as a Golang developer in an agile team and developed with unit tests.

eNTERFACE'15, Belgium

June 2015 - August 2015

Summer Internship

- Constructed Python modules, used Neo4j Graph database.

TSK Modsimmer, Turkey

August 2015 - September 2015

Summer Internship

- Wrote a simulation of fire forest using C++ with concurrency, also implemented interface with QT.
- Given a point of fire, the program estimates where the fire will go using different parameters like wind speed, tree population.

PROJECTS

Agile Estimator (Ongoing)

Developing an application for Scrum Boards. The application will offer the developers an environment that they can score the tasks without seeing each other's score.

Used tech: React, Express, Node.js and Supertest

Github repository: <https://github.com/twoinfinitemoops/AgileEstimation>

SQL Injection Web Page

Created a web page for exercising the live sql injection attack.

Used tech: Flask, MySQL

Github repository: https://github.com/twoinfinitemoops/sample_page_for_sql_injection

Movie Recommendation System with Apache Spark

Developed a content-based filtering and collaboration filtering based recommendation system using MovieLens 20M dataset.

Used tech: Scala, Apache Spark, and MLlib

Github repository: <https://github.com/twoinfinitemoops/MovieRec>

High Frequency Single-Currency-Pair Trading in Algorithmic Trading

Developed using Simple Moving Average and Exponential Moving Average indicators and made profits with some currencies.

Used tech: Java and Fix Protocol 4.2

Order/Execution Management System in Algorithmic Trading

Developed using FIX protocol(version 4.2) and offered different options for user, like TWAP execution of the security.

Used tech: Java and Fix Protocol 4.2

Malware Detection using LSTM

With a different perspective by treating a malware binary file as an image for Deep Learning course, it was also a Kaggle Challenge. We wrote a paper for showing the steps of our work.

Distributed System Project

Constructed layer-isolated network communication for highly mobile nodes using leader election algorithms in mininet environment.

Used tech: Python

Efficient Set Intersection Performance Measurement Project

For an Information Retrieval course, measured different set intersection algorithms like galloping search.

Used tech: C

nar: Distributed File System

As a senior year graduate project, we developed a distributed file system that provides an infrastructure that can store the file in cloud instead of local, project also supports different functions like storing the file, retrieving it and seeing status of it.

Used tech: C++

PUBLICATIONS

"QuEBERT: Query Expansion Using BERT", June 2020

”Classification on Strelized Binary Malware Representation by Using LSTM”, January, 2018.

”Proceedings of eNTERFACE 2015 Workshop on Intelligent Interfaces”, August 2015.

TECHNICAL STRENGTHS

FullStack: React, Redux, Node.js, Express, MongoDB, Typescript, Mongoose.

Languages: Python, C++, C, Javascript, Java, Scala, R, Assembly, Haskell, Verilog.

Tools: Tensorflow, Keras, PyTorch, AWS, RabbitMQ, Jupyter Notebook etc.

Toefl Score: 100 Reading: 26, Listening: 26, Speaking:25, Writing: 23

GRE Score: Quantitative: 167, Verbal: 141, Analytical Writing: 3,5

COURSES TAKEN

Undergraduate Courses: Artificial Intelligence, Machine Learning, Object Oriented Programming, Cloud Computing

Graduate Courses: Deep Learning, Statistical Data Analysis, Information Retrieval, Big Data Analytics, Computational Geometry, Algorithmic Trading, Distributed Systems

ACADEMIC ACHIEVEMENTS AND HONORS

Highest Departmental cGPA in all graduates of Master’s Degree in METU.

High Honor Student in different semesters of Bachelor’s Degree and Master’s Degree.

Placed 5th in Turkey in **Mathematics Olympiads** sponsored by OYAK in High School.

As **Huawei Seeds for the Future** Participant, chosen as one of the top 15 students from different universities in Turkey, spent two weeks in Beijing and Schenzen taking classes about 5G, and telecom.

Attending different algorithmic contests and gaining some local success.

REFERENCES

Nurettin Mert Aydin

Udemy

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Asst.Prof.Dr Berkay Celik

Purdue University

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Prof.Dr Nihan Kesim Cicekli

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Assoc.Prof.Dr Yusuf Sahillioglu

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