Fatih Durmaz

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Profile Summary

I am a Computer Science & Engineering Student in Sabanci University (Full Scholarship, 4rd Year).

Education

10/2017 - Present ISTANBUL TURKEY

Computer Science & Engineering

Sabanci University

- GPA: 3.93/4.00. Dean's High Honor List (4 times)
- top 4% in the faculty

High Success in Turkish National University Examination

- top 0.09% in Turkish University Proficiency Exam
- ranked 1463 among 2.2 million participants in Turkish National University Exam

Skills

Languages: English (Advanced), Turkish (Native), German (Elementary)

Python: Matplotlib, SciPy, Pandas, Facebook Prophet, NumPy

 $\textbf{C++:} \ \ \text{CS201} \ (Introduction \ to \ Computing) \ course, \ CS204 \ (Advanced \ Programming) \ course, \ CS300 \ (Data \ Structures) \ course, \ CS204 \ (Advanced \ Programming) \ course, \ CS300 \ (Data \ Structures) \ course, \ CS204 \$

CS 301 (Algorithms) course

OOP, Algorithms

Xilinx, VHDL Verilog: CS 303 Logic & Digital System Design Course

SOL, MySOL, PostgreSOL: 2 Internship Projects, CS310 (Mobile Computing) course, TUBITAK software developer internship.

Flex & Bison: CS 305 (Programming Languages) course

C: CS 305 (Programming Languages) course, CS 307 (Operating Systems) course.

.NetFramework, C#: CS 307 (Operating Systems) course, CS 408 (Computer Networks) course

Git: used in every course, research & internship project.

Java & Android Studio: CS 310 (Mobile Computing) course

JavaScript: CS308 course & TUBITAK software developer internship

Java SpringBoot: TUBITAK internship.

Working Experience

Software Developer Intern

Tubitak Bilgem YTE

- Full-Stack developer of an Event-Handler project.
- Achieved to come up with a stable working project with authentication-authorization.
- Backend is implemented with Spring Boot. Frontend is implemented with React.js and Material UI components
 are used. PostgreSQL is used as database.

Gained Skills: Spring Boot, JavaScript, React, Html, CSS, OOP, PostgreSQL

06/2020 - 08/2020 W KOCAELI TURKEY

Software Engineering Intern

Faraday Networks

Analyzed given time-series and extracted a useful sample using PostgreSQL, Pandas, NumPy & SciPy

- Trained Machine Learning model with given time-series and observed abnormalities. Wrote a script that notifies
 when abnormality is encountered. Used Facebook Prophet.
- Achieved to classify **SQL queries** to update the product without maintaining. Wrote a script that classifies queries automatically.

Gained Skills: software development, PostgreSQL, MySQL, Django, Python, Machine Learning, Facebook Prophet, Script, Data Science, Data Mining, Seasonality

02/2020 - 06/2020 [®] ISTANBUL TURKEY

Research Assistant

Sabanci University

- Research in Matching Problem Algorithms and development of a heuristic approximation algorithm.
- Developed a scalable programming architecture for the algorithm and implemented the algorithm in **python**.
- Visualization and analytics of the results of the implementation & applications in real life.

Gained Skills: research, machine learning, Algorithms, python, NP-complete, NP, Data Science, Pandas, Data mining, Academy, Project, Teamwork

10/2019 - 01/2020 ⁽¹⁾ ISTANBUL TURKEY

Student Learning Assistant

Sabanci University

- Provided administrative support to the Professor Kamer Kaya
- Did research on smart pointers & pointers and prepared lecture notes that have detailed explanations.
- Improved student's success by providing discussion questions about each topic in advanced programming lecture.

Gained Skills: Research, C++, Pointers, Smart Pointers

Projects

09/2021 - Present (9) ISTANBUL TURKEY

CPU vulnerabilities

- Working on detection of side-channel attacks. Making research and observation with statical analysis approach.
- Used: linux, C,C++,Python(for automated scripts)

04/2020 - 06/2021 ⁽⁹⁾ ISTANBUL TURKEY

Self-Health / Tele-Health Product

- Developed a prototype Telehealth product as a team.
- Designed the interface of the app.

09/2020 - 01/2021 ⁽ⁱ⁾ ISTANBUL TURKEY

.NET Cloud Simulation (basic)

- Scheduled working times and set virtual deadlines as a team.
- Developed client & server interfaces in **C#**.
- Developed download, transfer, copy, delete services for the client

Min Set Cover Problem Analysis

- As a team, Analyzed the MinSetCover problem and came up with a heuristic algorithm.
- Found an asymptotic bound for the algorithm then compared the performance of algorithm with implementation.
- Used **python, SciPy, pandas** in order to test the implementation. Tested with Blackbox and Whitebox methods. Then presented the work.

09/2019 - 01/2020 STANBUL TURKEY
Finite State Machine, ATM simulation on FPGA

- Programmed an FPGA device using finite state machine approach.
- Used XILINX software and learnt VHDH Verilog programming language.
- Understood how programmable devices work.

Activities & Interests

Tea Talks with CEOs – Member (2017 - 2019) | Sabanci University Robotics Club – Member (2017 - 2018) | Seahawks American Football Team – Player (2017 - 2018) | Playing Oud, Coding, Interested in Electronics,