Furkan K. **Yıldırım**

COMPUTER SCIENCE & INDUSTIRAL ENGINEERING · SENIOR STUDENT

(+90) 533 376 47 96 | furkankyildirim@gmail.com | www.furkankyildirim.com | furkankyildirim | furkankyildirim

Education

Sabancı University   *İstanbul, Turkey*

B.S. IN COMPUTER SCIENCE & INDUSTRIAL ENGINEERING (DOUBLE MAJOR) - BUSINESS ANALYTICS (MINOR)   *Sep. 2019 - Expected: Jun. 2024*

- **Computer Science Featured Courses:** Data Structures & Algorithms, Software Engineering, Programming Languages, Operating Systems, Database Systems, Network Systems, Mobile Application Development, Data Analysis, Machine Learning, Logic & Digital System Design.
- **Industrial Engineering Featured Courses:** Operation Research, Business Strategy, Simulations, Decision Economics, Information Systems.

Skills

Front-end	Flutter, React Native, HTML5, CSS
Back-end	Flask, FastAPI, REST API, Firebase
Programming	Python, C++, C#, JavaScript, Dart, SQL, Verilog, Rockwell Arena
Other	Discrete Event Simulation, Vehicle Routing Problems, Mobile Application Development, Web Development, Agile Software Development, Object Oriented Programming, Web crawling, MySQL, PostgreSQL MongoDB, Redis, Git, Jira, Miro, Docker

Professional Experience

Getir   *Istanbul, Turkey*

ALGORITHM DEVELOPER   *Nov. 2022 - Present*

- Taking role in the improvement and development of micro-services that receive 1.2M orders per day by using Python.
- Participating in the development of business logic algorithms to deliver orders in the most efficient way in GetirMarket domain.
- Maintaining in the development of Discrete Event Simulation to optimizing test and runtime performances of the algorithms by using Python, FastAPI, Numpy and Pandas in GetirMarket domain.
- Working on visualizing and analyzing data results from VROOM, OSRM and New Relic on the Getir Market platform using Python.

ALGORITHM DEVELOPER INTERN   *Apr. 2022 - Nov. 2022*

- Worked on optimization test and runtime performances of OSRM and VROOM results with Discreate Event Simulation on Getir Market platform using Python libraries FastAPI, Numpy and Pandas.
- Developed unit tests, developed integration tests and refactored codebases for micro-services of the Getir Market platform using Python.

Sabancı University   *Istanbul, Turkey*

LEARNING & TEACHING ASSISTANT   *Oct. 2021 - Jun. 2022*

- Assisted Instructor Gülşen Demiröz on Data Structures Course, gave homework, graded, and helped students on assignments, also held weekly office hours.
- Assisted students with their Python learning through weekly recitation sessions in the Computational Approaching to Problem Solving Course.
- Under the supervision of Prof. İnanç Arın, extracted Turkish texts from PDF images using Python and certain APIs with Sabancı University Center of Excellence in Data Analytics.

CRS Software   *Istanbul, Turkey*

SOFTWARE ENGINEER INTERN   *Jan. 2022 - Feb. 2022*

- Created and developed an e-commerce platform with .NET using C# language during the internship.
- Gained information on how to do market research and processes of system design.

Hyperlink Digital Library   *Istanbul, Turkey*

SOFTWARE ENGINEER   *Jun. 2021 - Jan. 2022*

- Developed a cross-platform mobile application of an e-Book Library with Flutter. Deployed at **Google Play Store** and **App Store** on January'22.
- Helped develop Semantic Search API in an e-Book Library with Python Flask, Redis and MySQL.

Projects

Delivery Route Optimization at E-Bebek Company

TEAM LEADER - ALGORITHM & BACK-END DEVELOPER

- Under the supervision of Prof. Dr. Bülent Çatay for graduation project, developing an algorithm that, deal with Vehicle Routing Problem (VRP) variant that matches orders with the delivery vehicles in E-Bebek Company and determines visualizes the vehicle routes, with Python.
- As a result of the analyzes made after the developments, it is expected that the cost will be reduced by 20% and 1.2M₺ per year with the routes created using the new model.

Voidture, E-Commerce Platform

LEAD MOBILE APPLICATION DEVELOPER & BACK-END DEVELOPER

- Developed an e-commerce mobile application for Furniture using Flutter and led the mobile application team.
- Took part in the demo presentation of the application. Used Jira and Bitbucket to maintain the project.
- Worked on the service development part of the application using FastAPI, PostgreSQL, Redis and Docker.

SUprerequisites, Analyzing Prerequisites of Courses of Sabancı University

ALGORITHM & BACK-END DEVELOPER

- Under the supervision of Prof. Dr. Hüsnü Yenigün, developed an algorithm and a script with Python to collect and analyze the prerequisites of Sabancı University courses. Visualized the analyzed data using JavaScript and Python Flask.

SUchedule, Mobile Application

FULL-STACK DEVELOPER

- Developed a mobile application (SUchedule) with React Native and back-end service with Python Flask, allowing Sabancı University students to create their schedules with a friendly user interface.
- Deployed the project at **Google Play Store** and **App Store**. Reached 2000+ downloads with 4.9/5 ranks.

WakeGuard, Location Based Alarm Application

MOBILE APPLICATION DEVELOPER

- Created location tracking and alarm application with React Native and Firebase named WakeGuard and leading the project.
- Deployed the project at **Google Play Store** and **App Store**. Reached 1000+ downloads with 4.8/5 ranks.

Competitions & Honors & Certificates

COMPETITIONS

2022	**ITU ACM Algocomp'22,** Ranked 15th with my team among 300+ teams in the competition which is an algorithm-based coding competition.	*Turkey-Wide*
2021	**Inzva Hackerspace,** Ranked 1st at Sabancı University and 9th on overall with my team among 200+ teams in the competition which is an algorithm-based coding competition.	*Turkey-Wide*

HONORS

2022	**Sakıp Sabancı %100 Encouragement Scholarship**, Awarded for academic achievement	*Turkey-Wide*
2022	**Dean's High Honor List**, Achieving grade more than 3.5 over 4.0.	*Turkey-Wide*
2021	**Dean's High Honor List**, Achieving grade more than 3.5 over 4.0.	*Turkey-Wide*
2019	**High Success Scholarship**, Ranked 1365th among 1,500,000+ students (0.09 percentile)in National University Entrance Exam (YKS 2019).	*Turkey-Wide*

CERTIFICATES

2023	**Microsoft Power BI - The Practical Guide**,	*Udemy*
2022	**Excel to Access: Intro to Microsoft Access for Excel Users**,	*Udemy*
2022	**EXCEL at Work - Complete MS Excel Mastery Beginner to Pro**,	*Udemy*

References

Gülşen Demiröz

INSTRUCTOR AT SABANCI UNIVERSITY

- Faculty of Engineering and Natural Sciences - Sabancı University, FENS Building, Office L015
- **Phone**: +90 (532) 585 61 50
- **Email**: gulsen.demiroz@sabanciuniv.edu
- **Relationship**: I was her Teaching Assistant in the CS300 Data Structures Course she lectured.