

# ONURCAN ERŞEN

Istanbul, Turkey | [ocersen@gmail.com](mailto:ocersen@gmail.com) | [Portfolio](#) | [LinkedIn](#) | [GitHub](#) | [LeetCode](#)

## SUMMARY

Experienced Software Engineer with a Computer Engineering degree from Istanbul Technical University. Proven track record in backend and frontend web development, UI/UX design, mobile development, game development, cloud services, and databases.

## EDUCATION

**Istanbul Technical University**, Istanbul, Turkey

June 2024

- BS in Computer Engineering, 3.34/4.00 GPA
- Graduation Project: [MetaboliticsDB](#) - Store, compare, search, visualize, and associate your metabolomics analyses with diseases.

## TECHNICAL SKILLS

- *Computer Languages:* Python (Django, Flask), Java (Spring Boot), JavaScript (Node.js, React, Redux), C/C++, C# (.NET, ASP.NET), TypeScript (Angular)
- *Tools:* SQLAlchemy, pandas, scikit-learn, Swagger, Postman, Git, Celery, Docker, Eclipse, IntelliJ IDEA, DBeaver
- *Skills:* Databases (PostgreSQL, MSSQL, Oracle Database, MongoDB, Redis), Cloud Services (Google Cloud Platform, Amazon Web Services), Mobile Development (React Native, Flutter), UI/UX (Figma), Game Development (Unity), DevOps (Jenkins, Kubernetes), Agile/Scrum (Jira), Machine Learning

## WORK EXPERIENCE

**Havelsan**, *Candidate Engineer*, Istanbul, Turkey

March 2024 – Present

Havelsan is a Turkish defense industry software company.

**ITU Bioinformatics Research Group**, *Software Developer & Undergraduate Researcher*, Istanbul, Turkey

February 2023 – Present

ITU Bioinformatics Research Group develops open-source tools for biological data.

- Maintained [MetaboliticsDB](#), a metabolomics analysis web app developed with TypeScript Angular and Python Flask frameworks.
- Improved analysis results by integrating REST services of metabolite databases. Speeded up analyses by nearly 90% with IBM CPLEX solver.
- Developed a periodic task to train and store machine learning models having F1 scores higher than 0.7 on analyses with the Python Celery tool. Deployed the project with Docker.

**IBTech**, *Software Engineer Intern*, Kocaeli, Turkey

August 2023 – December 2023

IBTech is a software subsidiary of QNB Finansbank.

- Developed bank card screens with C# .NET framework and services with Java for QNB Finansbank.
- Performed operations on Oracle databases. Prepared bank reports with JasperReports.

**Zorlu Holding**, *Software Engineer Intern*, Istanbul, Turkey

July 2023 – August 2023

Zorlu Holding is a Turkish multinational conglomerate.

- Operated database migration of ZITAM, a web app for IT asset management developed with Python Django framework.
- Improved database by migration to PostgreSQL from SQLite by writing a Python script with SQLAlchemy and pandas libraries.

**Aselsan**, *Software Engineer Intern*, Ankara, Turkey

August 2022 – September 2022

Aselsan is a Turkish defense electronics company.

- Built in-app support GUI for an aircraft mission planner with Java Swing toolkit and IntelliJIDEA. Applied best practices of coding by following design patterns.
- Developed text-to-HTML converter using regular expressions.

**Eteration**, *Software Developer*, Istanbul Turkey

October 2022 – January 2023

Eteration is a software company at ITU Technopark.

- Performed as a full-stack web developer in a Scrum team for Viennialife. Participated in Scrum events.
- Developed and tested microservice apps with Oracle databases using Java Spring Boot framework, Eclipse, Swagger, and DBeaver. Built user interfaces with React and Redux libraries.

## CERTIFICATIONS

**Commencis CloudCamp 2024**

January 2024 – February 2024

Attended comprehensive training on AWS infrastructure, S3, EC2, databases, VPC, security audit, Route 53, and DevOps practices.

**Eteration Bootcamp 2022**

June 2022 – July 2022

Took training on Agile principles, cloud services, microservice architecture, Spring framework, REST services, and React library.

## EXTRACURRICULAR ACTIVITIES

**ITU ACM Student Chapter**, *Organization Team Member*, Istanbul, Turkey

April 2022 – May 2022

- Arranged speakers for the Bootcamp 2.0 event.

**ITU Robotic Search and Rescue Team**, *Software Team Member*, Istanbul, Turkey

April 2022 – August 2022

- Developed a rescue robot controller with the Python Flask framework.

## ACHIEVEMENTS

**TUBITAK BILGEM Scholarship**

June 2023 – August 2023

## PUBLICATIONS

M. H. Celik, O. Ersen, T. Saleh, A. Dokay, A. Cakmak. "MetaboliticsDB: A Database of Metabolomics Analyses." Forthcoming.