Email: agardan.sefa@gmail.com https://www.g4stly.tr Mobile: +90 534 968 7561

### **EDUCATION**

### Istanbul Arel University

Bachelor of Engineering - Computer Engineering (3.95/4.00)

Istanbul, Turkiye Aug. 2021 - Present

### Experience

# Istanbul Arel University / TÜBİTAK TEYDEB 1505

Scholarship Student

Buyukcekmece, Istanbul Feb 2025 - Present

- o Project Name:: Akıllı Evler ve Binalar İçin Matter Protokolü Uyumlu Kablosuz Akıllı Anahtarlar, Prizler ve Algılayıcı Eko Sistemi Geliştirilmesi
- Summary: Worked on a smart building project involving image processing and mobile data visualization. Developed C-based algorithms to process infrared camera data for enhanced human detection. Also implemented mobile application features to fetch, filter, and display sensor data using charts and tables, enabling real-time monitoring and control of smart devices.
- o Tech Stack: C, Flutter

### HAVELSAN

AI Software Engineer Intern

Pendik, Istanbul

Jul 2025 - Aug 2025

- o Team:: Artificial Intelligence and Image Processing Team
- o Summary: Worked on various AI and computer vision projects in the maritime and defense domain. Conducted daily labeling tasks for thermal and normal imagery, developed automation scripts for data preprocessing, and implemented dehazing and sun-glare filtering algorithms with CUDA acceleration. Researched and experimented with real-time horizon line segmentation using classical methods, Deep Hough Transform, U-Net, YOLOv8-Seg, and SegFormer. Explored real-time object detection at high FPS (YOLO, RT-DETR, RF-DETR).
- Tech Stack: Python, PyTorch, TensorFlow, CUDA, OpenCV, Ultralytics (YOLO, RT-DETR), RF-DETR, U-Net, Transformers

## Projects

## • Kanuni Sultan Süleyman Hospital – Smart Hospital System

- Summary: Contributed as part of a development team to build an integrated healthcare solution including a patient mobile app, staff mobile app, admin desktop panel, and a Java Spring Boot REST API. The system improves hospital communication, real-time navigation, emergency response, and centralized management, optimized for low-infrastructure environments at minimal cost.
- o Tech Stack: Java, Spring Boot, Flutter, JavaScript, Electron

## • Arelim University Webpage Vulnerability Report

- Summary: Conducted a comprehensive security analysis of arelim.arel.edu.tr. Identified critical issues including unauthorized access, data leaks via REST APIs, XSS vulnerabilities, and SQL injection. Provided detailed exploitation scenarios and OWASP-based mitigation strategies.
- Tech Stack: Broken Access Control, SQL Injection, Cross-Site Scripting
- o Advisor: Asst. Prof. Dr. Tugberk KOCATEKIN

## • Full-stack Flashcard App

- Summary: Full-stack web application that people can create flashcard sets and share these as they like: publicly or just with their friends. Has a solid and secure auth system, using JWT, salts, pepper, and Argon2. Has friends system, and an admin panel.
- o Tech Stack: C# .NET, MVC, Javascript, JWT, MvSQL, AWS

### • Lecture Content Fetcher

- Summary: Python script that logs into Arel UZEM and downloads new lecture content.
- o Tech Stack: Python, Requests, BeautifulSoup

### • Arcade Games App

- o Summary: A super app with classics like Snake, Tetris, Pacman built with Pygame.
- o Tech Stack: Python, Pygame

### • eCommerce Full Stack

- Summary: Full-stack e-commerce app with Swagger docs, auth, tests, and responsive frontend.
- o Tech Stack: Java Spring Boot, React, TypeScript, MySQL, AWS

### Check my website, GitHub page, or LinkedIn page for more:

## SKILLS

- Programming Languages: Java, Javascript, Typescript, Python, Dart(Flutter), C, C++, SQL
- **Technologies**: React, NodeJS, Express, Electron, Spring Boot, Flutter, AWS, MongoDB, Firebase, Git, Github, Bootstrap, Material UI, Pygame
- Languages: Turkish: Native, English: Professional

#### CERTIFICATES

- Java Spring Boot Udemy
- NodeJS Express Udemy
- ReactJS Udemy
- Data Science, ML, DL Udemy
- Web Fundamentals TryHackMe
- Presecurity TryHackMe
- Jr Penetration Tester TryHackMe

### References

- Prof. Dr. Taner CEVIK
- Assoc. Prof. Dr. Nazife CEVIK
- Asst. Prof. Dr. Tugberk KOCATEKIN
- Asst. Prof. Dr. Unal KUCUK
- Firat BOZKAYA (HAVELSAN)