

# IBRAHIM YUSUF COSGUN

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For me, engineering is the art of finding effective solutions to any problem. I excel at solving complex problems and am eager to quickly learn and apply new technologies and methods in my projects. My problem-solving and analytical thinking skills enable me to contribute meaningfully to team projects and integrate smoothly into collaborative environments. I am determined to actively participate in team work and enhance the success of our projects with my creative ideas and engineering skills.

## STRENGTHS AND EXPERTISE

Team Contribution	API Development	OOP - SOLID
Project Planning	Multi-Threaded Development	.NET Framework
Problem Solving	System Development	.NET (Core)
Open to Learning	Micro Services Development	SQL

## PROGRAMMING LANGUAGES

C#	C++	C	Python
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## PROFESSIONAL EXPERIENCE

**Petek Yazilim Ltd.** **2022 - Present**

### Computer Engineer Intern (2022 - 2023)

- Received 3 months of training in server-side application development.
- Completed a 1-month training on application publishing and security at Evant Tech.
- Continued working as a C# .NET Backend Developer during my university education upon the company's request.
- Developed strong expertise in Multi-Threaded Programming and .NET technologies.

### Computer Engineer (2023 - Present)

- I led the development of Self-Checkout POS by resolving slowness and issues in the POS system and InPOS register integration.
- I upgraded and optimized previously developed WCF and WebService APIs to gRPC and REST APIs using .NET Core, increasing performance by up to 60%.
- I acquired significant experience in Concurrent (Multi-Threaded) Programming, with good knowledge in cross-thread synchronization and non-blocking resource sharing.
- I developed an automatic update system using Inter-Process Communication.

## EDUCATION

### Adana Alparslan Türkeş Science and Technology University

Bachelor's Degree - **English (B2)**

Major in Computer Engineering

**Courses Taken** (Information Package -> Course Structure):

<https://obs.atu.edu.tr/oibs/bologna/index.aspx?lang=en&curOp=showPac&curUnit=01&curSunit=32>

Communities:

**Teknofest Project Team** - Team Leader

**ATU Computer Science Student Club** - Board Member

# PROJECTS

Github Profile: <https://github.com/Giuseppe1343>

## Malware Detection via HPC Observing (Research)

Python

<https://github.com/Giuseppe1343/Malware-Detection-via-HPC-Observing>

In this paper, I present the proof of malware detection with Hardware performance counters by observing 300 malware and 300 normal software. I studied it with Decision Tree Classifier (ML) and LSTM (DL) algorithms.

## Multi - Threaded Game

C++

<https://github.com/Giuseppe1343/Multi-Threaded-Space-Invaders-Game>

It was developed by assigning different tasks to multiple threads without using any game development engine for game development. Basically, 4 groups of threads work by communicating through mutex and flags. Input Thread, Scene Thread, Entity Threads, Player Threads.

## Spider Chart Data Visualizer

C++

<https://github.com/Giuseppe1343/Spider-Chart-Data-Visualizer>

A data visualization application that dynamically creates a spider chart and aims to make it easier for you to analyze multiple data on this chart. No data visualization library was used. Created from pixels and custom algorithms.

## Kernel-Level App Development

C & C++

<https://github.com/Giuseppe1343/Kernel-App-Development>

Basic IO application that can run in 4 different environments including graphics and text kernel

## SQL Query Poster

C#

<https://github.com/Giuseppe1343/SQL-Query-Poster>

On the client side, you can export query results as Excel or e-mail. It processes and sends requests from clients on the server side. It also ensures that scheduled queries are sent to be sent regularly by the admin. It performs mail sending operations simultaneously .

## Thread-Safe Async Logging Library

C#

<https://github.com/Giuseppe1343/RLoggerLibrary>

The name of this library is RLoggerLib, it performs logging operations with minimal latency without blocking the main thread. It is designed to be thread-safe, and you can add your own logging targets. Pre-implemented logging targets are Debug, Color Console, Text File, Formatted Mail, Windows Event. **In the development process.**

## Integration of inPOS Device with Self-Checkout System

C#

(Private - Project) POS device supported self-checkout system project (multi-threaded) on the .Net

## Auto Update Client Service - Server

C#

(Private - Project) Infrastructure project that includes the processes of informing, delivering and updating the client about the new version of the application on the server side.

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### C# - Microsoft

## CERTIFICATES

<https://www.freecodecamp.org/certification/IbrahimYusufCosgun/foundational-c-sharp-with-microsoft>

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## REFERANCES

### Shahid Alam - Assistant Professor

<https://www.linkedin.com/in/alamshahid/>

### Ibrahim Cem Baykal - Assistant Professor

<https://www.linkedin.com/in/ibrahim-cem-baykal-874aa1250/>

<https://abs.atu.edu.tr/indexEN.html#!/ozgecmis/icbaykal>

More references available on request