CAN YILMAZ

BİLGİSAYAR MÜHENDİSİ | COMPUTER ENGINEER

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EDUCATION

ONDOKUZ MAYIS UNIVERSITY

Computer Engineer

2020-2025

GPA: 2.89/4

DİLLER

- English *B2 level*
- German *A1 level*

SKILLS
PROGRAMMİNG LANGUAGES

- Python
- C++
- C#
- Java
- Ruby

DATABASES

- Microsoft SQL Server

TOOLS AND TECHNOLOGIES

- Docker
- Unity
- MS Office
- Wireshark
- Contiki
- Scikit-learn
- Zemberek NLP
- BeautifulSoup
- Tkinter
- JSBSim
- JADX-GUI
- Android Studio
- PyQt5, 6
- FlightGear
- MissionPlanner
- MAVLink
- OpenCV
- PX4 + ArduPilot
- Gazebo
- YOLO

ABOUT ME

Hello, my name is Can Yılmaz. I am 24 years old. I completed my primary and middle school education with a scholarship at Doğa College and finished my high school education at Final Schools. Since childhood, I have been interested in computers and video games. This interest has significantly contributed not only to my technological knowledge but also to my personal and language development. For this reason, I chose to study Computer Engineering, which I completed at Ondokuz Mayıs University between 2020 and 2025. I am an enthusiastic individual eager to learn and explore new things. To be successful and active in my profession, I aim to work in institutions/companies that value development, teamwork, continuous learning, and innovation, where I can follow and contribute to technological advancements.

WORK EXPERIENCE
Company Name

DROHYTECH Teknoloji ~ 16.05.2025 -

Position

Software Development Engineer

Description

As a computer engineer working on fixed-wing unmanned aerial vehicles (UAVs), I specialize in flight control, simulation technologies, and ground control station (GCS) software development.

I develop projects that integrate computer vision, machine learning, and autonomous decision-making algorithms into flight software to enable real-time mission execution. I have experience integrating aerodynamic and sensor testing processes with automation workflows using simulation platforms such as FlightGear, JSBSim, ArduPilot, PX4, and Gazebo. Within the scope of flight safety, I also designed a Flight Termination Algorithm (FTA).

I continue to develop professional defense-oriented hybrid architectures using C++, Python, and QML for advanced GCS systems.

Company Name

BITES Defence & Aerospace ~ 31.07.2023 - 26.09.2023

Position

Intern

Description

At BITES Defense & Aerospace Technologies, I developed a Primary Flight Display application using C#.

PROJECTS

Computer Vision & AI (Object Detection and Tracking)
- Developed object detection and tracking systems using YOLOv5, YOLOv7, YOLOv8 and YOLOv11 architectures.
- Managed dataset collection, annotation, model training and validation pipelines.
- Performed image processing, masking and real-time video stream analysis using OpenCV.
- Integrated trained AI models into MAVLink-based Ground Control Station (GCS) software for real-time target recognition and autonomous decision-making.
- Designed AI modules capable of managing mission transitions and target prioritization during flight operations.

Flight Simulation & Aerodynamic Testing (FlightGear Automation)
- Conducted HIL/SIL testing for fixed-wing UAV models using simulation environments built on ArduPilot and FlightGear/JSBSim platforms.
- Analyzed aerodynamic behavior and integrated results into autonomous control logic.
- Designed a Flight Termination Algorithm (FTA) to ensure flight safety under control loss or high-risk conditions.
- Evaluated FTA performance by managing telemetry data flow between GCS and flight controller via MAVLink protocol.

PX4 & Gazebo Integration (System and Sensor Simulation)
- Performed system-level sensor simulation by integrating PX4 with Gazebo simulation environment.
- Tested virtual sensor models including IMU, GPS, barometer and LiDAR systems.
- Enabled camera integration for real-time image stream processing and YOLO-based object detection within simulation scenarios.

Ground Control Station (GCS) Software Development – Ongoing
- Developing a professional Qt and C++ based GCS software using a hybrid architecture combining C++, Python and QML.
- Implementing live video streaming with AI-assisted object tracking for real-time UAV image analysis.
- Supporting historical flight data inspection through recorded video analytics.
- Providing mission planning interface enabling autonomous and manual command transmission.
- Managing bidirectional telemetry and control signaling via MAVLink protocol.