

Mehmet Bayık

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Education

Bilkent University, B.S. in Electrical and Electronics Engineering, CGPA: 2.73/4.00

Ankara, TR
2019 - Present

- 1/2 Scholarship - [Transcript](#)

Izmir Science High School, High School Degree, CGPA: 96.50/100

Izmir, TR
2014 - 2018

- Field: Math-Science

Manisa Science and Art Center, Intellectual Ability Program Completion

Manisa, TR
2008 - 2018

- Field: Physics

Experience

Aselsan Defence Industries

Ankara, TR

Candidate Engineer

Nov. 2024 – Present
7 Months

- Focused on CCTV cameras car & people detection systems and train automation data logger systems.
- Used Visual Studio and Teststand to automatize test applications.
- Used C# for frontend to supply an interface to technicians and backend to work with embedded devices by writing custom libraries.

Summer Intern

Nov. 2024 – Present
1 Month

- Focused on CCTV cameras car & people detection systems and train automation data logger systems.
- Used Visual Studio and Teststand to automatize test applications.
- Used C# for frontend to supply an interface to technicians and backend to work with embedded devices by writing custom libraries.

Vestel Electronics Inc.

Manisa, TR

Summer Intern

Aug. 2021
1 Month

- Completed face-to-face internship in Vestel Electronics R&D Center.
- Worked with multiple teams in Big Data and AI Directorate.
- Used Fedora Linux and experienced with Docker, Git etc.
- Experienced Scrum methodology by joining daily & weekly meetings.

Projects & Certificates

Occupancy Detection with Thermal Sensors for Energy Optimization

Sep. 2024 - Present

- Implemented end-to-end system for senior project.
- Used Raspberry Pi Zero 2W, SPI and I2C protocols for sensor usage.
- CNNs and Tensorflow Lite used for occupancy detection.
- TCP/IP communication and Flask is used for backend.
- React and Grafana is used for frontend.

Explainable MRI Report Generation

May. 2025

- Used CNN, GradCAM and T5 Transformers with PyTorch.
- Created a multimodal framework to use image, text and metadata inputs. [GitHub](#)

MRI Image Distortion and Correction	Dec. 2024
- Used MATLAB and fft to simulate MRI motion distortion artifacts. - Autoencoders are created from scratch to correct these artifacts with PyTorch.	
Text to Image Synthesis	Dec. 2024
- Trained and used state-of-the-art models and created multimodal framework. - Used Python with Pytorch and experienced SD, DALLE3, Dalle Mini, WGAN. GitHub	
Unsupervised Text Guided Image Generation	May. 2024
- Developed a multimodal network and fine tuned pretrained models. - Used Python with PyTorch and experienced Styleganv2, CLIP, BLIP. Report	
Online Flower Shopping System	May. 2024
- Written in Python with pysimplegui. - SQL database is created for shopping system. GitHub	
Skin Cancer Prediction with Deep Learning	Dec. 2023
- Developed a deep learning model using CNN, Resnet and Transfer Learning. - Used Python with Sklearn, Tensorflow, Keras and Pytorch. GitHub	
Alzheimer MRI Prediction from Scratch	Dec. 2023
- Developed a ML model using linear regression, SVM and neural networks. - Used Python, Numpy, Pandas without any ML specific libraries. GitHub	
Machine Learning Specialization (3 Courses)	June 2023
Coursera, Andrew Ng, Stanford Online, Credential ID: X3JP2RSEPSJM	
FPGA Car Safety System	May 2021
- IR remote controlled car with lane keeping assist and collision avoidance system. - Project implemented in VHDL via BASYS 3 using Xilinx Vivado. GitHub	

Additional Experience & Awards

Teaching Assistant (2022): Given recitation classes to sophomore EEE students for EEE102 Digital Design Course.

Honor Student (2021): Achieved distinction by obtaining high GPA (3.00/4.00) while carrying at least min. course load.

Tutorship (2020-2021): Helped students during their CS115 Python course laboratory work for 3 semesters.

IELTS Academic Exam (2019) Overall Score: 6.5/9.0

1/2 Scholarship (2018) Due to 3454th rank among 2M high school graduates in OSYM university placement exam.

Skills & Interests

Technical: Python, MATLAB, VHDL, SQL, Assembly, Embedded C, Simulink, Proteus, LtSpice

Frameworks: Numpy, Pandas, Matplotlib, Seaborn, PIL, Sklearn, Tensorflow, Keras, Pytorch