Ediz Ferit Kula

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Education

BS Bogazici University, Mechanical Engineering

- GPA: 3.59/4.00
- Founder and president of Bogazici University Surf Community (2022-present)

Istanbul, Turkey Sept. 2017 to present

- **Technical University of Munich**, Mechanical Engineering, Student Erasmus Program
 - Relevant Coursework: Physics Informed Machine Learning, Applied Biorobotics, Control Theory.

Munich, Germany Apr. 2022 to Sept. 2022

Experience

FEV Turkey, Smart Vehicle Engineering Intern

- FEV is a globally leading technology company that provides engineering solutions in mobility sector.
- Worked on AI based battery state of health (SoH) estimation of electric vehicles, including machine learning method selection, data extrapolation, cloud architecture, and LSTM neural network design with Python.

Jan. 2022 to Apr. 2022

Istanbul, Turkey

Turkish Aerospace Industries, Mechanical Engineering Intern

- TAI is the largest aerospace company in Turkey which works on the design, development, manufacturing, and integration of aerospace systems.
- Analysed aircraft structures and the production process of an aircraft, wrote a report on possible design improvements for the final assembly.

Ankara, Turkey Aug. 2021 to Sept. 2021

Projects

Design of a LiDAR

- Reviewed the state of the art of LiDAR technology. Created a novel LiDAR design, which
 proposes two axes rotation with one actuator.
- Used Matlab for determining design parameters, Msc Adams for kinematic analysis and simulation, Solidworks for static analysis.

Istanbul, Turkey Fall 2021

Electric Motor Thermal Management for EVs and PHEVs

- An indirect liquid cooling system is proposed to cool down an electric motor of an EV.
- Used Matlab for finding optimum design parameters, Solidworks for designing the housing and heat sink, Ansys Fluent tool for validating the results.

Istanbul, Turkey Fall 2021

Load Balancing of a Mobile Application in Cloud

• Created a layer 7 load balancer with GCP Compute Engine for different versions of the backend service of a mobile application. Tested the system by using a linux server.

Istanbul, Turkey Fall 2021

Automatic Guitar Tunning Machine

• Designed and built a microcontroller-based guitar tunning machine that consists of the amplifier circuit, signal processing algorithms, decoder, H-bridges, pick-up sensors, and DC motors.

Istanbul, Turkey Fall 2020

Competitions

TUBITAK Efficiency Challenge

 Competed in the national autonomous electric vehicle race as a core team member and co-founder of the organization named Bogazici University Autonomous Systems.

• Worked on design, analysis, and simulation of mechanical and mechatronic components, vehicle manufacturing, PID controller, and project management.

Istanbul, Turkey Sept. 2018 to Sept. 2021

Certificates

Data Science and Machine Learning Bootcamp by Miuul

• Currently studying feature engineering, linear/logistic regression, KNN, CART, dimensionality reduction and machine learning pipeline with Python.

Istanbul, Turkey Sept. 2022 to present

Skills

Software: Simulink, Solidworks, Ansys, MSC Adams, Excel, Git, Linux

Programming: Matlab, Python, C/C++, Latex

Languages: English (Advanced), German (Elementary), Turkish (Native)

Extracurricular Activities

Myga Surf City, Kitesurfing Instructor

Izmir, Turkey dents. Summer 2020

• Gave kitesurf lessons over 150 hours to national and international students.