



Eren Tahiroğlu

Mechanical Engineering Student

- erentahiroglu@hotmail.com.tr [+90 553 104 16 93](tel:+905531041693)
[Konya/Türkiye](https://www.linkedin.com/in/erentahiroglu) [linkedin.com/in/erentahiroglu](https://www.linkedin.com/in/erentahiroglu)
<https://github.com/ErenTahiroglu> [03/11/2004](https://www.facebook.com/erentahiroglu)

[Summary](#)

Mechanical Engineering student with hands-on experience in additive manufacturing, mechanical design, material selection, and prototype development. Experienced in 3D-printed PLA components, quality testing, and R&D-oriented engineering work, with a strong focus on manufacturability, technical documentation, and industry-aligned problem solving.

[Experience](#)

[Apex Robotics](#)

Design and Materials Engineer

11/2025 – 02/2026 | Kayseri/Türkiye

- Contributing to the mechanical design and material selection of an autonomous pallet truck development project in accordance with TUSAŞ requirements; supporting design optimization with a focus on chassis and packaging compatibility, manufacturability, and structural strength.

[KIM Technologies](#)

Intern

08/2025 – 09/2025 | Kayseri/Türkiye

- Observed CNC machining and wire EDM processes during rotations in Production, Quality, and R&D; took part in mechanical testing and industrial X-ray CT applications in the quality laboratory, and supported experimental activities within R&D.

[Education](#)

Bachelor's Degree - Faculty of Engineering

[Abdullah Gül University](#)

09/2022 – Present | Kayseri/Türkiye

Mechanical Engineering, 3rd Year

Associate Degree – Open Education Faculty

[Anadolu University](#)

09/2024 – Present

Securities and Capital Markets, 2nd Year

[Projects](#)

Quantitative Investigation of the Effects of Thermal Aging on the Elastic Modulus, Tensile Strength, and Flexural Strength of PLA-Based 3D-Printed UAV Wings in Relation to Wing Camber Distribution and Cellular Infill Topology

Student Researcher

08/2024 – Present

Contributed to a TÜBİTAK 1002-A research project proposal on the usability of 3D-printed PLA UAV wing profiles. Worked on the design and evaluation of NACA 0012, NACA 2412, and NACA 4412 profiles with grid and tri-hex infill structures, focusing on thermal exposure, dimensional stability, and mechanical performance to support rapid wing replacement decisions in UAV applications.

AGU Automotive Club

Chair of the Audit Board

12/2024 – 05/2026 | Kayseri/Türkiye

- Responsible for auditing the club's financial, administrative, and organizational processes in accordance with its bylaws and university principles; leading reporting, risk monitoring, and process standardization efforts. During my term, I restructured audit mechanisms to strengthen institutional memory and supported process tracking and crisis management in the club's large-scale projects.

Active Member

08/2024 – 12/2024 | Kayseri/Türkiye

- Contributed to the follow-up of the club's management processes, event planning support, and internal team coordination.

Audit Board Member

09/2023 – 08/2024 | Kayseri/Türkiye

Contributed to the monitoring of the club's financial, administrative, and organizational processes in line with internal rules and university principles; supported reporting, process follow-up, and audit activities aimed at improving organizational discipline and transparency.

Event and Organization Unit Member

04/2023 – 09/2023 | Kayseri/Türkiye

Supported the planning and coordination of club events and organizational activities; contributed to operational follow-up, team coordination, and the smooth execution of event processes.

Abdullah Gül University

İŞKUR Youth Program Staff Member

11/2025 – 06/2026 | Kayseri/Türkiye

- Taking part in scheduled university promotion activities for high school groups and providing guidance to prospective students during campus tours.

Electromobile TEKNOFEST Team

Door and Lock Mechanism Unit Lead

11/2025 – Present

- Leading the mechanical design of doors and locking mechanisms in SolidWorks for integration with the existing vehicle chassis; coordinating the design process with a focus on assembly compatibility, manufacturability, and structural requirements.

AshCycle

Team Leader

06/2023 – 08/2024

- Led the process design of a project developed around an integrated waste management approach; defined the mechanical-biological pre-treatment, thermal and chemical recovery stages, and evaluation scenarios for by-products such as construction materials.

Organization

Contemporary Life Support Association (ÇYDD)

Volunteer Member – Scholarship Recipient

09/2021 – Present | Kayseri/Türkiye

- Between December 2023 and November 2024, I served as a full member and branch representative in the Youth Unit of the Kayseri branch of the Contemporary Life Support Association (ÇYDD). During this period, I actively contributed to the planning and execution of branch activities, took part in the organization of local and inter-branch events, and supported the development of communication and cooperation networks with ÇYDD branches in different cities. This experience contributed to the development of my organizational, representation, and leadership skills. I am currently still a scholarship recipient and volunteer member of the association.

Part-Time Student Assistant

07/2025 – 08/2025 | Kayseri/Türkiye

- Provided prospective students with information about the university and its academic programs during the admission preference period; coordinated meetings with faculty members and supported candidates in obtaining detailed information.

Certificates

AI-Supported Leadership Program (Aspire Institute - AILP)

Completed an 8-week applied leadership program focused on strategic time management, problem-solving, professional communication, team guidance, and the effective and responsible use of AI tools in work processes.

CYDD 13th Term Mentorship Project

Completed the 2024–2025 mentorship program organized by the Contemporary Life Support Association (CYDD) as a mentee, focusing on personal, academic, and career development.

Aspire Leaders Program (ALP)

Completed the 2024 Aspire Leaders Program, a structured international program involving at least 30 hours of training in leadership development, critical thinking, effective communication, and social impact.

DiscoverEU – Bulgaria

Participated in the DiscoverEU program in 2023, traveling internationally to Bulgaria by train. Improved intercultural communication skills, practiced foreign languages, and strengthened independent mobility and adaptability.

Languages

English — Proficient

Developed my English through preparatory education at Abdullah Gül University School of Languages and comprehensive training from A2 to C2 level at English Time Language Schools.

German — Basic

Russian — Basic

Skills

Additive Manufacturing

- FDM/FFF-based 3D printing for prototype development
- Basic print preparation and build planning
- Basic understanding of print orientation, manufacturability, and part design considerations
- Familiarity with PLA-based printed components

ANSYS — Amateur

- Basic static structural analysis
- Definition of boundary conditions and loading cases
- Mesh refinement
- Interpretation of stress and deformation results

SolidWorks — Competent

- Part design
- Assembly modeling
- Technical drawings
- Prototype-oriented design and design for manufacturability

Technical & Digital Tools

- Java (Basic)
- AI-assisted coding for rapid prototyping
- AI-assisted concept development and design support

Testing & Quality

- Basic mechanical testing
- Basic industrial X-ray CT inspection
- Basic evaluation of test results and component quality

Technical Documentation

- Technical reporting
- Process documentation
- Engineering documentation for design and testing activities