

Tarık Acet

Date of birth: 04/07/2002 | **Nationality:** Turkish | **Gender:** Male | **Phone number:** (+90) 5541414182 (Mobile) | **Email address:** tarikacet@gmail.com | **LinkedIn:** <https://www.linkedin.com/in/tarik-acet> | **Address:** Balıkesir, Türkiye (Home)

ABOUT ME

Analytical and results-driven Mechanical Engineering graduate with hands-on expertise in 3D CAD modeling, structural FEA simulations, precision metrology (GD&T), and physical R&D testing. Proven technical leadership as the Lead Structural Engineer for a 1st-place award-winning vertical landing rocket system (TEKNOFEST). Experienced in laboratory validation and quality compliance under ISO/DIN standards. Seeking a Junior / Graduate Mechanical Engineer position in the Netherlands, with full eligibility for the Highly Skilled Migrant (Kennismigrant) program.

WORK EXPERIENCE

R&D ENGINEERING INTERN – E.C.A. VALFSEL ARMATÜR A.Ş. – 01/06/2026 – 03/07/2026 – MANISA, TÜRKİYE

- Executed hydrostatic pressure, thermal endurance, and mechanical lifecycle validation tests on fluid control valves and armature systems.
- Diagnosed failure modes, analyzed leakage causes, and prepared engineering validation reports in compliance with ISO/EN standards.
- Collaborated with the R&D design team on CAD prototype revisions to optimize sealing performance and mechanical durability.

MECHANICAL ENGINEERING INTERN – KASAN PRECISION TOOLS – 04/2026 – 05/2026 – İZMİR, TÜRKİYE

- Conducted high-precision calibration workflows and dimensional inspections aligned with German DIN/ISO precision measurement standards.
- Verified geometric dimensioning and tolerancing (GD&T) parameters (runout, concentricity, perpendicularity, flatness) on critical machined components using micrometers, vernier calipers, dial indicators, and height gauges.
- Executed non-contact 2D optical inspections and surface profile checks using optical comparators and toolmaker microscopes.

MECHANICAL ENGINEERING INTERN – ÖZEN DÖKÜM A.Ş. – 06/2024 – 06/2024 – BALIKESİR, TÜRKİYE

- Conducted Optical Emission Spectrometry (OES) chemical composition analyses on molten metal samples to ensure precise alloy chemistry and grade verification.
- Prepared alloy charge calculations and adjusted additive elements during induction furnace melting operations.
- Analyzed solidification cycles and conducted post-casting inspections to identify and prevent defects (porosity, shrinkage, inclusions).

MECHANICAL ENGINEERING INTERN (MANUFACTURING WORKSHOPS) – DOKUZ EYLÜL UNIVERSITY – FACULTY OF ENGINEERING – 06/2022 – 07/2022 – İZMİR, TÜRKİYE

- Completed comprehensive hands-on manufacturing training across conventional machining, metal cutting, welding, and benchwork.
- Operated conventional machine tools including manual lathes (turning, facing, threading), vertical/horizontal milling machines, and drill presses per technical drawings.
- Performed manual arc welding (SMAW/MIG), oxy-acetylene flame cutting, and precision sheet metal forming.
- Applied dimensional verification and surface quality inspection using micrometers, vernier calipers, and depth gauges.
- Complied strictly with workshop occupational health and safety (OHS) regulations and machine safety protocols.

● **EDUCATION AND TRAINING**

08/2020 – 07/2026 İzmir, Türkiye
BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING Dokuz Eylül University

- Degree Recognition: Fully accredited under the European Anabin framework (H+ status – direct degree recognition across the EU).
- Bachelor's Thesis: Design, Structural Modeling, and FEA Simulation of Vertical Landing Rocket Systems.
- Core Modules: Machine Elements, Mechanics of Materials, Finite Element Analysis (FEA), Fluid Dynamics, Thermodynamics, CAD/CAM, Manufacturing Processes.

Level in EQF EQF level 6

● **PROJECTS**

2023 – 2026
Rocket9 – Vertical Landing Rocket System

- Served as Lead Mechanical Design and Structural FEA Engineer for the Rocket9 Vertical Landing Rocket team.
- Spearheaded end-to-end mechanical system design, modeling assemblies, landing gear mechanisms, and aerodynamic fin controls using 3D CAD.
- Performed static, transient dynamic, and modal FEA simulations to guarantee structural integrity under extreme dynamic landing loads.
- Led manufacturing coordination (CNC machining, 3D printing), hardware integration, and field validation tests, securing 1st Place in the national TEKNOFEST competition.

● **HONOURS AND AWARDS**

2025
1st Place Winner – TEKNOFEST Vertical Landing Rocket Competition – T3 Foundation & TEKNOFEST

Achieved 1st place in the national engineering competition as core lead engineer responsible for mechanical modeling, structural FEA simulations, and physical system validation.

● **LANGUAGE SKILLS**

Mother tongue(s): **TURKISH**
Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	C1	B2	B2	C1
GERMAN	A2	A2	A2	A2	A2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

● **SKILLS**

SolidWorks | AutoCAD | Finite Element Analysis (FEA) | GD&T (Geometric Dimensioning and Tolerancing) | Precision Metrology | Python | MATLAB | Minitab | Linux | Workflow Automation (n8n) | ISO / DIN Standards Compliance