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About Me

I am currently pursuing my studies in Mechanical Engineering at Pamukkale University. Since 2022, I have successfully reached the finals of Teknofest competitions four times, achieving rankings such as 4th and 6th place. Throughout this process, I have gained experience in software development, mechanical design, and project management. Additionally, during high school, I gained international educational experience in Lithuania and Spain as part of the Erasmus+ program. I further developed my management and organizational skills by serving as the president of the Teknofest Student Society at Isparta University of Applied Sciences. That same year, I took on the role of mechanical group leader for the Kutay Rocket Team, which was executing a TÜBİTAK 2209-A project. Currently, while continuing my work with the Kutay Rocket Team, I am preparing to deliver an oral presentation on my research at IAC 2026, one of the world's leading space organizations. I am also a T3 Foundation Instructor-Mentor scholarship recipient.

Education

Pamukkale University 2025 - 2029
Mechanical Engineering,
Bachelor's Degree
GPA: 2.7/4

Isparta University of Applied Sciences 2024 - 2025
Mechanical Engineering, Bachelor's Degree
GPA: 3.1/4

Academic Publications and Papers

77th International Astronautical Congress (IAC 2026) - Optimization of 3D Printing in Microgravity: Load-Oriented Void Minimization via Ferromagnetic-Doped Polymers and Localized Magnetic Fields

Projects

Kutay Rocket - Mechanical Team Leader

November 2024 – September 2026

Teknofest 2025 and 2026 – A3 High-Altitude Rocket Competition Finalist

- I carried out all internal and external mechanical designs for the avionics and payload subsystems of the rocket—a finalist in the Teknofest 2025 High-Altitude Rocket Competition—using SolidWorks.
- I participated in the aerodynamic design processes for the rocket's outer airframe and was responsible for establishing the final airframe configuration following manufacturing.
- I took part in strength and durability testing for the composite and metal materials used.

Pautim - Software Developer

November 2022 – July 2023

Teknofest 2023 – Ranked 6th in Turkey

- I developed the Flutter-based cross-platform mobile application architecture for the project that ranked 6th in Turkey at the Teknofest 2023 finals.
- I created a sustainable solution that achieved an 80% reduction in material costs by digitizing over 20 physical therapy materials.
- I enhanced the application's accessibility by designing user-friendly interfaces tailored to the needs of speech and language therapists.

An Accurate Shot Saves Lives – Team Captain & Software Developer

November 2021 – September 2022

Teknofest 2022 – 4th Place in Turkey

- I served as Team Captain and Software Lead for the project that ranked 4th in Turkey at the Teknofest 2022 Technology for Humanity Competition.
- I developed real-time image processing algorithms using Python and OpenCV libraries to improve the water-drop accuracy of firefighting helicopters.
- I managed the technical coordination of a five-person team and ensured the software was delivered according to the project schedule.

Certificates and Achievements

- T3 Entrepreneur Development Program | T3 Foundation – 2023

Note: Comprehensive mentorship program organized for entrepreneurs selected as Teknofest finalists

(Successful Graduate).

- Erasmus+ Key Competencies in the Digital Age | EU / Šiaulių Stasio Šalkauskio Gymnasium | Lithuania – 2023
- Image Processing with OpenCV 3/3 (Python) | Udemy – 2023
- App Development Course with Flutter | Udemy – 2023
- Advanced C++ Programming | Udemy – 2023
- Machine Learning Algorithms | BTK Academy – 2024
- Teknofest 2023 - Technology for Humanity Competition: 4th Place (Turkey)
- Teknofest 2024 - Technology for Humanity Competition: 6th Place (Turkey)
- Teknofest 2025 - Rocket Competition (A3 Category): 20th Place (Turkey)
- T3 Foundation Scholarship Recipient (Selected from among ~5,000 candidates nationwide)

Work Experience

CNC Operator – Family Workshop (Tan Torna) Summer

periods – 2018 – Present

- Tool changing, resetting, tolerance measurement, and surface quality inspection
- Practical experience in the production of metal and plastic parts

Technical Competencies

- Mechanical Design & CAD: SolidWorks (Advanced), Fusion 360, Autodesk, Technical Drawing (GD&T), Assembly Modeling, Surface Modeling, Analysis with Ansys
- Manufacturing & Prototyping: 3D Printing Technologies (FDM), CNC Machining (Turning/Milling), Rapid Prototyping, Material Science & Testing
- Software & Programming: Python (Image Processing & Algorithms), C++, Dart (Flutter), Kotlin
- Libraries & Frameworks: OpenCV, NumPy, Pandas (Data Analysis), Flutter SDK
- Development Tools: Git & GitHub (Version Control), VS Code, Android Studio, Matlab

Foreign language

- Turkish - Native Language
- English - B1