



MURAT ÖNEN

İstasyon Mahallesi, Sınır Sokak, No:9, Daire: 4

Ankara 06790 Türkiye

murat.onen@metu.edu.tr

+90 (530) 707 2635

Personal Profile

Not only a persevering physicist but also a resilient engineer achieving multidiscipline by studying in mechatronics and aerospace areas. Has gained a high-honor status for Bachelor's program thanks to time management skills and establishing priorities. Owns distinguished soft skills such as collaboration and communication besides quantitative skills.

Education

2018 – Present	Physics, B.S., Double Major Program Middle East Technical University, Ankara, TURKEY CGPA: 3.56/4.00
2020 – 2022	Aerospace Engineering, B.S., Minor Program Middle East Technical University, Ankara, TURKEY CGPA: 3.37/4.00
2016 – 2021	Mechanical Engineering, B.S., Major Program Middle East Technical University, Ankara, TURKEY CGPA: 3.72/4.00
2012 – 2016	Izmir Kız High School İzmir, TURKEY Grade: 90.75/100

Work Experience

August 2021 – Present	Mechatronic Systems Design Engineer, Mechanical Design Department ROKETSAN Rocket Industries & Trade Inc., Ankara, TURKEY <ul style="list-style-type: none">taken responsibility to develop a mechanical gyroscope used to determine the position of rockets without GPS signalsimproved the safety mechanisms preventing premature detonation, performing kinematic optimization, and constructing the mathematical dynamic modelcome up with an innovative mechanism that redirects the reaction forces of the parts rotating over each other to prevent them from locking under friction or axial force, and this mechanism is inserted into artilleries for range correctionbeen in the paper and patent application process for own study
-----------------------	--



- January 2021 – August 2021 Research and Development Engineer, Power Turbines Department
TUSAŞ Engine Industries, Eskişehir, TURKEY
- conducted an extensive literature survey on factors affecting the efficiency of turbo-shaft engines
 - examined the flow behavior of the fundamental parts using the Ansys Fluent program
 - participated in the preparation of the Aero Rig tests of the TS1400 first Turkish-national helicopter engine
- August 2020 – September 2020 Intern, Servo Technologies & Design Department
ASELSAN Electronic Industries, Ankara, TURKEY
- conceptualized theoretical knowledge in engineering projects allowing radar systems move readily
 - diagnosed a part of the project to calculate the center of mass for radar systems to receive signals smoothly
 - investigated the verification and validation tests in environmental conditions laboratory
- June 2019 – July 2019 Intern, Manufacturing Department
FNSS Defense Systems, Ankara, TURKEY
- inspected different discrete manufacturing processes including welding, water jet cutting, and finishing operations
 - earned the importance of engineering drawing in manufacturing and designing
 - familiarized with executing a cost analysis for simple machined parts

Further Skills

Computer Skills

High Level Programming Languages: Python, Arduino
CAD & CAM Programs: Siemens NX, SolidWorks, Catia
Microsoft Office Programs Package
MATLAB, Simulink
ADAMS Dynamic Simulation Tool
ANSYS Fluent, Mechanics

Language Skills

English: Advanced
Turkish: Native tongue

Certificates & Awards

- November 2022 IELTS, Score: 6.5/9
- February 2021 Score: 91/100 ; ALES (Equivalent Exam of GRE)
- March 2020 Extensive Case Study by Ford Otosan, Navigate
- January 2019 Model Tank Competition Award by FNSS Defense Systems, EBEC



Main Projects in Bachelor's

October 2022 – Present (Physics)	<i>Laser Driven Ion Acceleration: Space Propulsion</i>
April 2022 – June 2022 (Propulsion)	<i>Turbofan Engine Design: Improved Version of F100-PW-220</i>
March 2021 – July 2021 (BioMEMS)	<i>Design of a Syringe Pump for Microfluidic Applications</i>
February 2021 – June 2021 (Robotics)	<i>Adapting to Pandemic: Controlling Self-Positioning Object Remotely</i>
October 2020 – January 2021 (Mechatronics)	<i>Self-Playing Snake Game Using Search Algorithms</i>
February 2020 – June 2020 (Mechanism Design)	<i>Design of a Conveyor Box Transport Mechanism</i>
October 2019 – January 2020 (Mechanical Design)	<i>Gearbox Design of an Unmanned Helicopter</i>

Membership & Scholarships

2205 & 2248 Programs, Scholarship by TÜBİTAK for Encouraging Double Major in Sciences
Scholarship by Middle East Technical University
Scholarship by Turkey Government for Undergraduate Students
Chess Community, METU
Theater Club, METU Alumni Association
Turkish Folklore Community Choir, METU

References

Available upon request.