

Abdul Samet Erkek

Results-driven and motivated mechatronics engineer with in-depth knowledge of both mechanic, electronic, and computer engineering. Highly-condensed 3 years of expertise working with mechatronic system development, robotics, software development, and artificial intelligence in companies such as Baykar (Bayraktar). Currently doing master's at Boğaziçi University in Electrical and Electronics Engineering with specialization in control.

Skills

ROS Robot Kinematics Mechatronic System Design Control C#
Design, Develop, Test, Improve C/C++ STM32 PIC Microcontrollers
Real-Time Communication Protocols Interrupt Design Debugging
Python Matlab PHP GitHub Proteus Solidworks Aviation

Experience

Main Tools || Outcomes

STM32 Control
ML Aviation
Rest is confidential

Baykar Defense || Istanbul, Turkey

Prototype Development Engineer

2021/07 - 2022/06

Developing hardware, software and innovative algorithms for variety of UAV systems including robotics, control solutions, sensors, optimization, and many more.

Developing image-based artificial intelligence applications for UAV systems.

Sintertek || Istanbul, Turkey

Mechatronics Engineer

2018/08 - 2020/01

Played a key role in strategizing the mechatronic systems of the company's projects. Designed all mechatronic system CAD, manufactured and tested.

Developed GUI for Metal 3D Printer

Designed and manufactured an industrial ribbon mixer and a powder transfer unit including all mechanicals, electronics, and control.

Optimized the heat distribution systems and control algorithms of the build chamber of the SLS 3D printer of the company named Solidzer 450 Pro.

Esit Electronic LTD. || Istanbul, Turkey

Software Engineer Intern

2018/05 - 2018/08

Worked on the development and integration of a new image processing system to increase efficiency, security, and quality

Studied on check weighers GUI and reporting software

Hochschule Aalen || Aalen, Germany

Research Lab Assistant Engineer

2017/11 - 2018/02

Studied on Shape Memory Alloy Actuator's mathematical modeling with Matlab by designing the experimental setup and experimenting.

Education

Master of Science

Control ROS

Electrical and Electronics Engineering / Control Major
Boğaziçi University, Istanbul, Turkey

2020 - still

Bachelor of Science

Mechatronics
Robotics Satellite

Mechatronics Engineering
Yıldız Technical University, Istanbul, Turkey

GPA:3,15
2013 - 2019

Erasmus+ Student Exchange

International Teamwork

Mechatronics Engineering
Hochschule Aalen, Aalen, Germany

2017 - 2018



📍 Tokyo, Japan

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🌐 abdulsameterkek.com

For details of competitions and personal projects, please check <http://abdulsameterkek.com/>

Languages	Turkish (Native) English (Fluent) Japanese (Beginner) (going to start Japanese Language School at July 2022) German (Beginner)
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Achievements	Competitions CANSAT 2017 - Solar Powered Glider Sponsored by NASA, American Astronautical Society, Siemens, and more World 5th in Report and Design World 8th in Overall Space Missions Texas, USA
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TURKSAT Model Satellite Competititon 2017 1st Place Istanbul, Turkey

Conference and Publication 2017 8th International Conference on Recent Advances in Space Technologies (RAST 2017) "Design of solar-powered subscale glider for CanSat competition" 2017 8th International Conference on Recent Advances in Space Technologies (RAST), Istanbul, 2017, pp. 453-457.

Volunteering Co-founder of Space and Avionic Systems Club, Yildiz Technical University, Istanbul, Turkey Instructor at UASK at SolidWorks, Arduino, Robotic Control seminars
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Certifications	2019/3 - IELTS Certificate, 6.5 2020/3 - Certificate of Participation to Advanced Entrepreneurship 2021/3 - Certificate of Completion of Applied ROS Training
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Personal Projects	mytwinmind.com - AI-supported Social Media Platform 12 DOF Cat-like Quadruped Robot Autonomus Drone with Image Processing FDM 3D Printer Multifunctional 5-axis CNC Router and more...
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Self-PR	My strongest point is that I have deep knowledge and condensed experience in the fields of both mechanics, electronics, and software, which are the three disciplines on which mechatronics is based on. In this way, I can strategize and understand how to integrate the mechanic, electronic, and software sub-systems of a project efficiently with respect to system requirements. I am also capable of developing new trending topics such as AI. I believe that I am able to satisfy your expectations in your company, and my experience in parallel areas and being a mechatronics engineer will be advantageous.
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References	Asst. Prof. Dr. Cüneyt Yılmaz Department Vice President of Mechatronics Engineering Tolgahan Akbulut Lead of Artificial Intelligence Team at Baykar Defense Contact information will be given upon request.
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