



Mehmet Fatih ERTÜRK

Astronautical Engineer

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EDUCATION

- ISTANBUL TECHNICAL UNIVERSITY**, Istanbul-Türkiye 2019 - 2022
M.SC. IN AERONAUTICS AND ASTRONAUTICS ENGINEERING
• CGPA: 3.50 | Thesis: *Magnetic Attitude Control of a Nanosatellite*
- UNIVERSITY OF TURKISH AERONAUTICAL ASSOCIATION**, Ankara-Türkiye 2014 - 2019
B.SC. IN ASTRONAUTICAL ENGINEERING
• CGPA: 3.00 | Thesis: *The Gooding's Angles-Only Orbit Determination Method*

EXPERIENCE

- TURKISH AEROSPACE INDUSTRIES**, Ankara-Türkiye 11.2021 - NOW
AOCS-FD ENGINEER
- INVAP (AS TAI EMPLOYEE)**, San Carlos de Bariloche-Argentina 09.2022 - 08.2023
AOCS-FD ENGINEER
- TURKISH AEROSPACE INDUSTRIES**, Ankara-Türkiye 05.2021 - 10.2021
ASSISTANT ENGINEER
- TÜRKSAT COMPANY**, Ankara-Türkiye 06.2018 - 07.2018
INTERN / INITIAL ORBIT DETERMINATION
- 5. MAIN MAINTENANCE FACTORY**, Ankara-Türkiye 07.2017 - 08.2017
INTERN / MAIN MAINTENANCE OF AIR VEHICLES

SKILLS

- EXPERIENCED:** GMAT | MATLAB | Python | SolidWorks | Word/Excel/PPT
FAMILIAR: STK | Java | Orekit | Adobe Photoshop | Adobe Premier Pro | Adobe Illustrator
BEGINNER: C | ODTK | FreeFlyer

PUBLICATIONS & PRESENTATIONS

- Ertürk, M.F. and Hajiyev C. (2023), *Optimal Tuning of a Nanosatellite Attitude Controller Using TRIAD-Aided Kalman Filter and Particle Swarm Optimization*, 74th International Astronautical Congress (IAC), Azerbaijan, 2023.
- Ertürk, M.F. and Hajiyev C. (2023), *PD Controller with Particle Swarm Optimization for Satellite Attitude Control*, International Symposium on Unmanned Systems and the Defense Industry 2022, ISUDEF 2022 (Spain), Sustainable Aviation, Springer, Oct 2023.
- Ertürk, M.F. and Hajiyev C. (2023), *Satellite Magnetic Attitude Control Based on PD Controller with Particle Swarm Optimization*, International Scientific Conference on Aeronautics, Automotive and Railway Engineering and Technologies, Bulgaria, 2023.
- Ertürk, M.F. and Hajiyev C. (2023), *Development of Satellite Attitude Controller with TRIAD and Particle Swarm Optimization Using Only Magnetic Actuators*, 5th International Conference on Problems of Cybernetics and Informatics (PCI), Azerbaijan, 2023.
- Ertürk, M.F. and Hajiyev C. (2022), *PD Controller with Particle Swarm Optimization for Satellite Attitude Control*, International Symposium on Unmanned Systems and the Defense Industry 2022, Madrid, Spain, June 2022.
- Ertürk, M.F., Koprucu, S.U., Sengil, N., Sisman, T.C. and Yaman, M. (2021), *Low-Energy and Low-Thrust Lunar Trajectory Design Using Particle Swarm Optimization*, 11. Ankara International Aerospace Conference, Ankara, Turkey, Sept 2021.

- Ertürk, M.F. (2020), [Doppler Based Orbit Determination with Optimization](#), Open Source CubeSat Workshop, Dec 2020. [YouTube](#)
- Arabacı, M.C., Cirtıl, H.M., Erdenk, B., Ertürk, M.F., Ghanbarpourasl, H., Kaya, M., Sisman, T.C. and Yenidoğan, K.(2020), [Doppler Ölçümlerinin Optimizasyonla Yörünge Tespitinde Kullanılması \(Orbit Determination with Doppler Measurements Using Optimization\)](#), VIII. Ulusal Havacılık ve Uzay Konferansı (8. National Aerospace Conference), Ankara, Turkey, Sept 2020.
- Ertürk, M.F., Koprucu, S.U., Gomroki, M.M., Sengil, N., Sisman, T.C. ve Yaman, M. (2020), [Bir Küp Uydu Ay Görevi İçin Ön Yörünge Tasarımı \(Preliminary Orbit Design for a Cubesat Moon Mission\)](#), VIII. Ulusal Havacılık ve Uzay Konferansı (8. National Aerospace Conference), Ankara, Turkey, Sept 2020.
- Ertürk, M.F. (2019), [Discussion of Angles Only Methods For The Case Of Multi-Observer](#), 10. Ankara International Aerospace Conference, Ankara, Turkey, Sept 2019
- Ertürk, M.F., Koprucu, S.U., Arda, I., Erkan, Y.B. ve Sisman, T.C. (2018), [Uyduların Belirli Bir Bölgeden Görünür Geçişlerinin Saptanması \(Determination of Visible Passes of Satellites from a Spesified Location\)](#), VII. Ulusal Havacılık ve Uzay Konferansı (7. National Aerospace Conference), Samsun, Turkey, Sept 2018.

PROJECTS

- 2021: SatNOGS Ground Station Operation [#1616](#)
- 2020: RA-Sat: Accessible Space for High-schools, Teknofest-2020 Education Technologies Competition (9th) [Details](#)
- 2019: Amateur Satellite and Astronomy Ground Station of UTAA [Details](#)
- 2018: Establishment of UTAA Astronomy Community [Details](#)

SOCIAL

HOBBIES: Theatre | Ham Radio | Cycling | Chess

ACCOUNTS: [ResearchGate](#) | [Linkedin](#) | [Twitter](#)