Aykut Yıldız's CV

aykut.yildiz@tedu.edu.tr, aykutyildiz1983@gmail.com

Electronics Engineering
TED University
06420, Kolej
Ankara, Turkey

Assistant Professor
http://aykutyildiz.com
Office: B469
+90 312 585 02 78

"I never dreamed about success. I worked for it." (Estee Lauder)

References

- Prof. A. Bülent Özgüler, Prof. Ömer Morgül, and Prof. Sinan Gezici.

Education

- BSc, MSc, and PhD in Electronics Engineering, Bilkent University, Turkey.
- Ankara Atatürk Anatolian High School, Turkey.

Academic Advisors

- MS with Prof. Orhan Arıkan, and PhD with Prof. A. Bülent Özgüler

Academic Research Interests

Radar Signal Processing, Robotics, System Theory, Control Theory, Swarm Theory, Game Theory, and Opinion Dynamics.

Conducted Projects

2020–2021	"Artificial Intelligence Based Autonomous Flight and Control System for Unmanned Aerial Vehicles" (TED University LAD project)
2021–2024	"Modeling Opinion Dynamics in Social Media as Differential Games and Automated Detection of Trolls" (TÜBİTAK 1001 project)

Participated Projects

2007–2010	TÜBİTAK Project on Milimeter Wave Radars(MILDAR)
2010–2011	TÜBİTAK Project on Earthquake Detection using Ionospheric Data
2011–2012	ASELSAN Servo Control Project
2014–today	TÜBİTAK Project on Game Theoretical Swarm Modeling

Small Scale Projects

Production of efficient motor-generator system prototype , Software for teaching clock to children, 30Mhz Radio design.

Certificates and Exams

- Bilkent Diction Course certificate
- Bilge Adam Photoshop certificate
- KPDS(language examination): 95/100
- ALES: 95/100
- CAHEM Wordpress certificate
- "Introduction to Power Electronics by University of Colorado Boulder on Coursera. Certificate earned on June 30, 2017"

Achievements

- 1st rank in Ankara at Anatolian High School Exam.
- Fifth rank in Turkey at PYBS School Exam.
- 36th rank in Turkey at ÖSS examination.
- Erhan Demir Success and Diligence Award
- High Honour in undergrad for 6 semesters
- 4.00/4.00 at 6 semesters (including summers)
- TÜBİTAK BİDEB scholarship for master students
- TÜBİTAK scholarship for graduate research areas with high priority
- TÜBİTAK MİLDAR Ar-Ge Project scholarship

Internship

- Aselsan MST Production Management Summer Intern: A report has been written on MST production processes.
- Aselsan MST Project Management Summer Intern: I worked as a programmer in Male and Female Voice Detection.

Working Experience

R&D Engineer in Aselsan HC Department. (Software and Hardware Design of Automated Test Systems)

Programming and Markup Languages

MATLAB advanced, Java-intermediate, C- beginner, Assembly- beginner, Microcontroller programming-beginner, Csharp-beginner, HTML-advanced, SQL-beginner, VHDL digital circuit design language-beginner, LATEX-advanced

Software and Applications

Texmaker, Overleaf, Squid, Turnitin, Moodle, Zoom, Mendeley, MS Stream, and Freeplane.

Operating Systems

Windows-advanced, Linux-intermediate, Unix-beginner, MAC beginner

Community Services

IEEE reviewer, Elsevier reviewer, Eksi Sozluk author, Quora author, www.milliyet.com.tr blogger, vocabulary.com content maker, IT specialist of Yıldız Teknik (http://tonerdolumprinter.com/),

Languages

Turkish (Mother tongue), English (Advanced), Russian-(1 course), Spanish-(4 courses), German-(5 courses), French-(1 course), Italian-(1 course), Japanese-(1 course).

Publications

2021	A. Yıldız and A.B. Özgüler. Opinion dynamics of stubborn agents under the presence of a troll as differential game. *Turkish Journal of Electrical Engineering & Computer Sciences*, 29(7):3259–3269, 2021
2017	A. Yıldız and A.B. Özgüler. Planar swarming motion under single leader as Nash equilibrium. *International Journal of Mathematical models and Methods in Applied Sciences*, 11:139–143, 2017
2016	M. U. B. Niazi, A.B. Özgüler, and A. Yıldız. Consensus as a Nash equilibrium of a dynamic game. In *SITIS*, 2016
2016	A. Yıldız. *Foraging motion of swarms as Nash equilibria of differential games*. PhD thesis, Bilkent University, 2016
2016	A. Yıldız and A. B. Özgüler. Foraging motion of swarms with leaders as Nash equilibria. *Automatica*, 73:163–168, 2016
2015	A. Yıldız and A. B. Özgüler. Partially informed agents can form a swarm in a Nash equilibrium. *IEEE Transactions on Automatic Control*, 60(11):3089–3094, 2015
2013	A.B. Özgüler and A. Yıldız. Foraging swarms as Nash equilibria of dynamic games. *Cybernetics, IEEE Transactions on*, 44(6):979–987, 2013
2012	A. Yıldız and A.B. Özgüler. Swarming behavior as Nash equilibrium. In *NecSys 2012 Workshop*, volume 3, pages 151–155, 2012
2011	A. Yıldız, O. Arıkan, and F. Arıkan. Spatio-temporal interpolation of ionospheric TEC data. In *2011 IEEE 19th Signal Proc.and Comm. App. Conference (SIU)*, pages 817–820. IEEE, 2011
2010	A. Yıldız. Polynomial fitting and total variation based techniques on 1-D and 2-D signal denoising. Master's thesis, Bilkent University, 2010
2010	A. Yıldız and O. Arıkan. Denoising piecewise polynomial signals based on Particle Swarm Optimization. *Journal of Dokuz Eylül University Engineering Faculty*, 2010
2010	A. Yıldız and O. Arıkan. Signal denoising by piecewise continuous polynomial fitting. In *SIU 2010-IEEE 18th Signal Processing and Communications Applications Conference*, pages 69–72
2010	A. Yıldız and O. Arıkan. Denoising ISAR images by total variation reduction. In *ASES 2010 (Symposium on Avionics and System Integration)*