

M. ASLI AYDIN

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EDUCATION

Ph.D.

Industrial Engineering, **Boğaziçi University** August 2016
Dissertation: “Decentralized Decomposition Methods for Block Angular Linear and Integer Programming Problems”

M.S.

Industrial Engineering, **Bahçeşehir University** June 2008
Thesis: “Solving University Course Timetabling Problem Using Genetic Algorithm”

B.S.

Mathematics, **Boğaziçi University** July 2003

RESEARCH INTERESTS

Machine Learning
Decomposition Algorithms, Large-Scale Optimization
Linear Programming
Integer Programming

JOURNAL PAPERS

Aydın, M. Aslı, Taşkın, Z. Caner (2019). Decentralized Decomposition Algorithms for Peer-to-peer Linear Optimization. *RAIRO-OR*, 54(6), 1835-1861., DOI: 10.1051/ro/2019097 (SCI-E)

Aydın, M. Aslı (2020). Müşteri Kaybı Tahmininde Sınıf Dengesizliği Problemi. *Politeknik Dergisi*, DOI: 10.2339/politeknik.734916 (ESCI)

CONFERENCE PAPERS

İ. Aytutuldu and **M. A. Aydın**, "Investigation of the Noise Sensitivity of Machine Learning Algorithms on Credit Card Fraud Detection," *2021 29th Signal Processing and Communications Applications Conference (SIU)*, 2021, pp. 1-4, doi: 10.1109/SIU53274.2021.9477832.

M. A. Aydın, "Using Generative Adversarial Networks for Handling Class Imbalance Problem," *2021 29th Signal Processing and Communications Applications Conference (SIU)*, 2021, pp. 1-4, doi: 10.1109/SIU53274.2021.9477939.

REFEREED CONFERENCE PROCEEDINGS

Aydın, M. A., “Telekomünikasyon Sektöründe Müşteri Kaybı Tahmini”, *Yöneylem Araştırması – Endüstri Mühendisliği XXXIX. Ulusal Kongresi (YAEM)*, Başkent Üniversitesi, ANKARA, 12-14 Haziran, 2019.

Aydın, M. A., Taşkın, Z. Caner, “Decentralized Benders Decomposition for Block Angular Linear Programs”, *Proceedings of EURO 27th European Conference on Operational Research*, University of Strathclyde, Glasgow, SCOTLAND, 12-15 July, 2015.

Aydın, M. A., Taşkın, Z. Caner, “Solving Block Angular Linear Programs via Total Decentralization”, *Proceedings of EURO-INFORMS 26th European Conference on Operational Research*, Sapienza University of Rome, Rome, ITALY, 1-4 July, 2013.

Aydın, M. A., Taşkın, Z. Caner “Blok Köşegen Yapı Gösteren Doğrusal Programlama Problemlerinin Tamamen Özerk Yönetimle Çözümü”, *Yöneylem Araştırması – Endüstri Mühendisliği XXXIII. Ulusal Kongresi ve Uluslararası IIE Konferansı (YAEM-IIE)*, İSTANBUL, 26-28 Haziran, 2013.

Aydın, M. A., Taşkın, Z. Caner “Büyük Boyutlu Doğrusal Programlama Problemleri İçin Yeni Bir Parçalama Yöntemi”, *Yöneylem Araştırması – Endüstri Mühendisliği XXXII. Ulusal Kongresi (YAEM)*, Doğu Üniversitesi, İSTANBUL, 20-22 Haziran, 2012.

PROJECTS

Boğaziçi University BAP, Researcher 01/2012 - 07/2013

“A Novel Decomposition Algorithm for Large-Scale Linear and Integer Programming”

TÜBİTAK 1512, Researcher 02/2019 - 08/2019

“BlindeSense – Vegetable Detection System”

EXPERIENCE

ASSISTANT PROFESSOR, Bahçeşehir University 01/2023 – ..

- INE5110 Probabilistic Models And Applications (Spring2023)
- ARI5002 Optimization Methods for Artificial Intelligence (Spring2023)

ASSISTANT PROFESSOR, Doğu University 01/2018 – 09/2021

- MAT131/MATH131 Fundamentals of Math (Fall 2017/2018)
- İSTA 203 Engineering Statistics (Fall 2020)
- İSTA208/STAT208 Probability and Statistics (Spring 2018/2019/2020/2021)
- IE 304 / EM 304 Applications in Data Analysis (Spring 2019/2021, Fall 2019/2020)
- EM331/IE331 Facility Planning and Design (Fall 2018)

SKILLS

Programming Python, R

Software Application Packages LINDO/LINGO, GAMS, MS Office, CPLEX, LATEX

Foreign Language English