

Res. Asst. Mehmet Ali Silgu

Personal Information

Email: msilgu@itu.edu.tr

Web: <http://akademi.itu.edu.tr/msilgu/>

Address: İTÜ İnşaat Fakültesi İnşaat Mühendisliği Bölümü Ulaştırma Koridoru, Maslak/İstanbul

International Researcher IDs

ScholarID: qZj1NYoAAAAJ

ORCID: 0000-0002-7667-8796

Education Information

Undergraduate Double Major, Karadeniz Technical University, Mühendislik Fakültesi, İnşaat Mühendisliği, Turkey 2005 - 2010

Undergraduate, Karadeniz Technical University, Mühendislik Fakültesi, Jeolojü Mühendisliği, Turkey 2005 - 2010

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Postgraduate, MULTIVARIATE AND FUZZY CLUSTERING APPROACHES TO DYNAMIC CLASSIFICATION OF TRAFFIC FLOW STATES, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, İnşaat Mühendisliği/Ulaştırma Mühendisliği, 2015

Research Areas

Civil Engineering, Transportation Engineering, Traffic Engineering, Engineering and Technology

Academic Titles / Tasks

Research Assistant, Istanbul Technical University, İnşaat Fakültesi, İnşaat Mühendisliği, 2014 - Continues

Research Assistant, Bartın University, Faculty Of Engineering, İnşaat Mühendisliği, 2013 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Extension of Traffic Flow Pattern Dynamic Classification by a Macroscopic Model Using Multivariate Clustering**
Çelikoğlu H. B., Silgu M. A.
TRANSPORTATION SCIENCE, vol.50, no.3, pp.966-981, 2016 (SCI-Expanded)
- II. **Bee Colony Optimization for innovative travel time estimation, based on a mesoscopic traffic assignment model**

Dell'Orco M., Marinelli M., Silgu M. A.

TRANSPORTATION RESEARCH PART C-EMERGING TECHNOLOGIES, vol.66, pp.48-60, 2016 (SCI-Expanded)

III. K-means clustering method to classify freeway traffic flow patterns

Silgu M. A., Çelikoğlu H. B.

Pamukkale Üniversitesi Mühendislik Bilimleri Dergisi, vol.20, no.6, pp.232-239, 2014 (SCI-Expanded)

Books & Book Chapters

I. A Comparative Performance Analysis of Variable Speed Limit Systems Control Methods Using Microsimulation: A Case Study on D100 Freeway, Istanbul

Sadat M., Abuamer I. M., Silgu M. A., Çelikoğlu H. B.

in: Lecture Notes in Computer Science: COMPUTER AIDED SYSTEMS THEORY - EUROCAST 2017, Moreno-Díaz R., Pichler F., Quesada-Arencibia A., Editor, Springer International Publishing Ag, Cham, pp.462-469, 2018

II. Proceedings of the "19th EURO Working Group on Transportation Meeting, EWGT2016, 5-7 September 2016, Istanbul, Turkey"

Çelikoğlu H. B., Lav A. H., Silgu M. A.

Elsevier Science B.V., Oxford, 2017

Refereed Congress / Symposium Publications in Proceedings

I. Analyzing Network-Wide Effects of Cooperative Adaptive Cruise Control without Intersection Control

Silgu M. A., Erdağı İ. G., Çelikoğlu H. B.

17th International Conference on Computer Aided Systems Theory (EUROCAST2019), Las Palmas De Gran Canaria, Spain, 17 - 22 February 2019, pp.166-167

II. Using Adaptive Signal Controllers for Pedestrian Green Time

Silgu M. A., Akyol G., Çelikoğlu H. B.

17th International Conference on Computer Aided Systems Theory (EUROCAST2019), Las Palmas De Gran Canaria, Spain, 17 - 22 February 2019, pp.176-177

III. Ulaştırma altyapı projelerinin finansmanında Kamu-Özel İşbirliği - KÖİ: Genel bir değerlendirme ve oyun kuramı temelli bir öneri

Akti S., Silgu M. A., Çelikoğlu H. B.

Karayolu 4. Ulusal Kongresi, Ankara, Turkey, 28 - 29 November 2018, pp.1-10

IV. Approximation of Emission for Heavy Duty Trucks in City Traffic

Silgu M. A., Muderrisoglu K., Unsal A. H., Çelikoğlu H. B.

2018 IEEE International Conference on Vehicular Electronics and Safety, ICVES 2018, Madrid, Spain, 12 - 14 September 2018

V. Analyzing the Effects of Driver Behavior within An Adaptive Ramp Control Scheme: A Case-Study with ALINEA

Abuamer I. M., Sadat M., Silgu M. A., Çelikoğlu H. B.

IEEE International Conference on Vehicular Electronics and Safety (ICVES), Vienna, Austria, 27 - 28 June 2017, pp.109-114

VI. Clustering Traffic Flow Patterns by Fuzzy C-Means Method

Silgu M. A., Çelikoğlu H. B.

15th International Conference on Computer Aided Systems Theory, Las Palmas, Spain, 8 - 13 February 2015, pp.756-764

VII. Clustering Traffic Flow Patterns by Fuzzy C-Means Method: Some Preliminary Findings

Silgu M. A., Çelikoğlu H. B.

15th International Conference on Computer Aided Systems Theory, Las-Palmas, Spain, 8 - 13 February 2015,

Memberships / Tasks in Scientific Organizations

System Dynamics Society, Member, 2020 - Continues, United States Of America
IEEE Control Systems Society, Member, 2018 - Continues, United States Of America
IEEE Intelligent Transportation Systems Society, Member, 2017 - Continues, United States Of America
IEEE, Member, 2017 - Continues, United States Of America

Scientific Refereeing

IEEE ACCESS, SCI Journal, January 2019
TRANSPORTATION RESEARCH PART D-TRANSPORT AND ENVIRONMENT, SCI Journal, January 2018
Transportation Research Part C, SCI Journal, January 2017
IEEE Intelligent Transportation Systems Magazine, SCI Journal, October 2016
IEEE Transactions on Intelligent Transportation Systems, SCI Journal, August 2016
Heliyon, Other Indexed Journal, March 2016

Metrics

Publication: 21
Citation (WoS): 81
Citation (Scopus): 152
H-Index (WoS): 4
H-Index (Scopus): 6

Congress and Symposium Activities

Cooperative Interacting Automobiles, Attendee, Stuttgart, Germany, 2017
2017 IEEE International Conference on Vehicular Electronics and Safety (ICVES), Attendee, Wien, Austria, 2017
2017 EURO WINTER INSTITUTE ON "METHODS AND MODELS IN TRANSPORTATION PROBLEMS", Attendee, Padova, Italy, 2017
Smart Mobility Summer School, Attendee, Las Palmas, Spain, 2016
18th Meeting of the EURO Working Group on Transportation, Attendee, Rotterdam, Netherlands, 2015
The 15th International Conference on Computer Aided Systems Theory, Attendee, Las Palmas, Spain, 2015