Ahmet Bahaddin ERSOZ, Ph.D.

abersoz@metu.edu.tr Github Linkedin
Twitter Google Scholar Personal Web Page

Experience

2023 – · · · · **Instructor,** Civil Engineering Department, Middle East Technical University

2017 – · · · · **Software Developer,** i4Works Co., Technopolis, Middle East Technical University

2013 – · · · · **Research Assistant,** Civil Engineering Department, Middle East Technical University

Education

2016 – 2023 **Ph.D. Civil Engineering** in Middle East Technical University
Thesis title: *Automated Earthwork Progress Monitoring for Construction Projects*

2013 – 2016 **M.Sc. Civil Engineering** in Middle East Technical University
Thesis title: *Development of UAV-Based Pavement Crack Identification System Using Artificial Intelligence*

2009 – 2013 **B.S. Civil Engineering** in Middle East Technical University

Research Publications

1. **A. B. Ersoz**, "Demystifying the Potential of ChatGPT-4 Vision for Construction Progress Monitoring," in *8th Int. Proj. Constr. Manag. Conf.*, 2024.
2. **A. B. Ersoz** and O. Pekcan, "Removal of Construction Machinery Occlusion using Image Segmentation and Inpainting for Automated Progress Tracking," in *Proc. 41st Int. Symp. Autom. Robot. Constr.*, 2024, pp. 759–767. DOI: 10.22260/isarc2024/0099.
3. **A. B. Ersoz**, O. Pekcan, and E. Akbas, "Aidcon: An aerial image dataset and benchmark for construction machinery," *Remote Sensing*, vol. 16, no. 17, p. 3295, 2024.
4. **A. B. Ersoz**, O. Pekcan, M. Altun, T. Teke, and O. Aydogmus, "Utilizing digital technologies for rapid damage assessment and reconnaissance: the February 6, 2023 Kahramanmaraş-Türkiye earthquakes (Mw 7.7 and Mw 7.6)," *Bull. Earthq. Eng.*, no. 0123456789, 2024, ISSN: 15731456. DOI: 10.1007/s10518-024-01925-w.
5. D. J. Frost, E. Duman, O. Pekcan, **A. B. Ersoz**, S. Erinmez, and M. M. Roozbahanivi, "Overview of Role of Digital Technologies in Türkiye Post-Earthquake Reconnaissance Operations," in *8th Int. Conf. Earthq. Geotech. Eng.*, 2024.
6. **A. B. Ersoz**, "Automated Earthwork Progress Monitoring for Construction Projects," *Ph.D. Diss.*, 2023.
7. **A. B. Ersoz**, M. Altun, T. Teke, *et al.*, "Enhancing Earthquake Damage Assessment and Response with Data Management and Visualization," in *7th Int. Conf. Earthq. Eng. Seismol.*, 2023.
8. O. Pekcan, **A. B. Ersoz**, T. Teke, *et al.*, "Digital Data Management for Post-Earthquake Field Studies," in *Reconnaiss. Rep. Febr. 6, 2023 Kahramanmaraş-Pazarcık Elbistan Earthquakes*, 2023.
9. **A. B. Ersoz** and O. Pekcan, "Autonomous Earthwork Monitoring Framework for Construction Projects using Unmanned Aerial Vehicles," in *XI.Turkish Natl. Photogramm. Remote Sens. Assoc. Tech. Symp.*, 2022.

10 **A. B. Ersoz**, O. Pekcan, and O. B. Tokdemir, "Lean Project Management using Unmanned Aerial Vehicles," *Tamap J. Eng.*, 2019. DOI: 10.29371/2018.3.65.

11 M. Altun, **A. B. Ersoz**, T. Teke, T. Kurt, A. Akcamete-gungor, and O. Pekcan, "Application of Artificial Neural Networks on Building Energy Estimation," in *Int. Conf. Eng. Technol.*, 2017.

12 **A. B. Ersoz**, O. Pekcan, and T. Teke, "Crack Identification for Rigid Pavements using Unmanned Aerial Vehicles," *IOP Conf. Ser. Mater. Sci. Eng.*, vol. 236, no. 1, 2017, ISSN: 1757899X. DOI: 10.1088/1757-899X/236/1/012101.

13 **A. B. Ersoz**, O. Pekcan, and T. Teke, "Unmanned Aerial Vehicle Based Pavement Crack Identification Method Integrated With Geographic Information Systems," in *Transp. Res. Board 96th. Annu. Meet. Washington, DC. USA*, 2017.

14 **A. B. Ersoz**, "Development of UAV-based Pavement Crack Identification System using Artificial Intelligence," *M.Sc. Diss.*, 2016.

15 O. Pekcan, **A. B. Ersoz**, and T. Teke, "Pavement Crack Detection Using Unmanned Air Vehicles," in *Transp. Res. Board 95th. Annu. Meet. Washington, DC. USA*, 2016.

16 O. Pekcan, **A. B. Ersoz**, T. Teke, G. G. Dogan, G. O. Tarakcioglu, and C. Baykal, "Damage Identification of Coastal Structures Using Image Processing Techniques," in *35th Int. Conf. Coast. Eng. Istanbul, TURKEY*, 2016.

Skills

Languages	Fluent in English, Turkish Native Speaker.
Programming	Python, Javascript, SQL, LaTeX
Databases	MySQL
Web	HTML, CSS, NodeJS, AngularJS, Amazon Web Services

Miscellaneous Experience

Certification

2021	**Neural Networks and Deep Learning**, Deep Learning AI *Credential ID:4ABXHC8JXV5U*
	Convolutional Neural Networks, Deep Learning AI *Credential ID:76T4DL87B844*
2020	**Introduction to Computer Science**, Harvard University
2019	**Learning How to Learn**, UC San Diego *Credential ID:9T5PASK7SQXW*

References

Available on Request