Halil Ceylan, PhD, Dist.M.ASCE	
Pitt-Des Moines, Inc. Professor of Civil, Construction and Environmental Engineering (CCEE), Geotechnical and Materials Engineering Group and Intelligent Infrastructure Engineering Program ISU Site Director, PEGASAS - FAA COE on General Aviation Director, Program for Sustainable Pavement Engineering & Research (PROSPER) at Institute for Transportation (InTrans) 410 Town Engineering Bldg. Iowa State University 813 Bissell Road Ames, IA 50011-1066	515-294-8051 hceylan@iastate.edu IOWA STATE UNIVERSITY Civil, Construction, and Environmental Engineering IOWA STATE UNIVERSITY Institute for Transportation

EDUCATION

- PhD, Civil Engineering, University of Illinois at Urbana-Champaign, IL, 2002
- MS, Civil Engineering, University of Illinois at Urbana-Champaign, IL, 1995
- MS, Civil Engineering, Dokuz Eylul University (Izmir, Turkey), 1993
- BS, Civil Engineering, Dokuz Eylul University (Izmir, Turkey), 1989

PROFESSIONAL EXPERIENCE

- Professor, Department of Civil, Construction and Environmental Engineering, Iowa State University, Ames, IA, 2015–present
- Associate Professor, Department of Civil, Construction and Environmental Engineering, Iowa State University, Ames, IA, 2010–2015
- Assistant Professor, Department of Civil, Construction and Environmental Engineering, Iowa State University, Ames, IA, 2002–2010

SELECTED RESEARCH PROJECTS

Cumulative research funds for more than 145 research projects totaling approximately $24 million (with over $28 million project funds including matching funds)

- *Evaluating and Implementing Ground Penetrating Radar (GPR) for Continuous and Rapid Monitoring of Moisture Fluctuations in In-Service Roads* (Minnesota Department of Transportation and Minnesota Local Road Research Board): 2025–2027, $129,910, PI
- *Effect of Increased Precipitation (Heavy Rain Events) on Minnesota Pavement Foundations* (Minnesota Department of Transportation and Minnesota Local Road Research Board): 2022–2024, $169,999, PI
- *Use of Plastics in Road Materials (Paving)* (Minnesota Local Road Research Board): 2023–2025, $139,446, PI
- *Have Minnesota's Warmer Winters Increased the Number of FT Cycles?* (Minnesota Department of Transportation and Minnesota Local Road Research Board): 2020–2021, $59,984, PI
- *Base Stabilization Additives – Effect on Granular Equivalency (GE)* (Minnesota Department of

Transportation): 2019–2024, $195,229, PI

- *Determining Pavement Design Criteria for Recycled Aggregate Base and Large Stone Subbase* (National Road Research Alliance and the Minnesota Department of Transportation): 2017–2021, $225,000, PI
- *Quantify the Benefits of Using Geotextiles and Geogrids to Improve the Performance of Unbound Pavement Layers* (Minnesota Department of Transportation): 2024–2026, $192,140, Co-PI
- *Pavement Design: Performance of Base vs. Subbase* (Minnesota Local Road Research Board): 2023–2025, $218,809, Co-PI

SELECTED PUBLICATIONS

Authored/co-authored over 465 peer reviewed publications and over 495 presentations

- Oguntoye, K. S., H. Ceylan, S. Kim,, M. Sourav, B. Gulmezoglu, and Y. Mo. 2025. Automatic Pavement Maintenance Predictions using Language and Machine Learning Models. *Proc., International Airfield & Highway Pavements Conference (Pavements 2025)*, Glendale, AZ, June 8–11, pp. 269–280.
- Koh, Y., H. Ceylan, S. Kim, and I. H. Cho. 2024. An Artificial Intelligence Based Approach for Predicting Structural Damages of Paved Road Systems under Superloads. *Construction and Building Materials*, Vol. 411.
- Citir, N., O. Kaya, H. Ceylan, S. Kim, and D. Waid. 2023. Estimating Local Pavement Performance and Remaining Service Interval using the Neural Networks-based Models and Automation Tool. *Road Materials and Pavement Design*.
- Rezaei-Tarahomi, A., O. Kaya, H. Ceylan, K. Gopalakrishnan, S. Kim, and D. R. Brill. 2020. ANNFAA: Artificial Neural Network-based Tool for the Analysis of Federal Aviation Administration's Rigid Pavement Systems. *International Journal of Pavement Engineering*.
- Ceylan, H., M. B. Bayrak, and K. Gopalakrishnan. 2014. Neural Networks Applications in Pavement Engineering: A Recent Survey. *International Journal of Pavement Research and Technology*, Vol. 7, No. 6, pp. 434–444.
- Ceylan, H. 2002. "Analysis and Design of Concrete Pavement Systems Using Artificial Neural Networks," PhD Dissertation. University of Illinois at Urbana-Champaign, Champaign, IL.

PROFESSIONAL AFFILIATIONS, HONORS, AND SERVICE

- Member of more than 35 national and international committees and organizations, editorial board member for 9 international journals, 20 track organizer/chair, presided 49 sessions, 23 other professional activities (including international advisory committees), since August 2002

GRADUATE ADVISORS AND POSTDOCTORAL SPONSORS/ THESIS ADVISOR AND POSTGRADUATE-SCHOLAR SPONSOR

- 73 graduate students/theses advised; currently, 12 PhD students and 1 master's student advising as major or co-major professor (as of summer 2025); 17 postdoctoral scholars/ professional staff supervised

AWARDS, RECOGNITIONS

- 2024 Transportation Research Board (TRB) Roy W. Crum Award
- 2022 Class of Distinguished Members, American Society of Civil Engineers