Halil Ceylan, Ph.D. 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

- University of Illinois at Urbana-Champaign, Ph.D., Civil Engineering, December 2002
- University of Illinois at Urbana-Champaign, M.S., Civil Engineering, May 1995
- Dokuz Eylul University, Izmir, Turkey, M.S., Civil Engineering, June 1993
- Dokuz Eylul University, Izmir, Turkey, B.S., Civil Engineering, June 1989

PROFESSIONAL EXPERIENCE

- Professor, CCEE, Iowa State University, July 2015 – Present.
- Associate Professor, CCEE, Iowa State University, July 2010 – June 2015.
- Assistant Professor, CCEE, Iowa State University, 2002 – 2010.

SELECTED RESEARCH PROJECTS

- **Cumulative research funds for more than 130 research projects are approximately $20.4 million (over $23.6 million project funds including matching funds**)
- Investigators: **Ceylan, H.**, Brooks, C. N., Peshkin, D. G., and Kim, S. **Small Unmanned Aircraft System (sUAS) for Pavement Inspection. Sponsor**: Federal Aviation Administration (FAA); Duration: September 28, 2020 – October 15, 2023; Total funding: $737,267 = $529,142 of original grant received in 2020 + $208,125 of supplemental funding for an existing grant as new project tasks were added in 2021: Role: PI.
- Investigators: **Ceylan, H.**, Kim, S., Zhang, W., Waid, D., and Moore, B. **Development of a Smartphone-Based Road Performance Data Collection Tool**, Sponsor: Iowa Highway Research Board (IHRB), Duration: June 1, 2019 – December 31, 2023; Total funding: $ 296,901; Role: PI.
- Investigators: **Ceylan, H.**, and Kim, S. **Effect of Increased Precipitation (Heavy Rain Events) on Minnesota Pavement Foundations**, Sponsor: Minnesota Department of Transportation (MnDOT)

and Minnesota Local Road Research Board (LRRB), Duration: January 1, 2022 – May 31, 2024; Total funding: $169,999; Role: PI.

- Investigators: **Ceylan, H.**, Gopalakrishnan, K., and Kim, S. **Implementing a Multiple-Slab Response Model for Top-Down Cracking Mode in Rigid Airport Pavements**, Sponsor: Federal Aviation Administration (FAA); Duration: August 15, 2015 – February 14, 2018; Total funding: $509,192; Role: PI.
- Investigators: **Ceylan, H.**, Dong, L., Gopalakrishnan, K., Taylor, P. C., and Kim, S**. Development of a Wireless MEMS Multifunction Sensor System and Field Demonstration of Embedded Sensors for Monitoring Concrete Pavements**, Sponsor: IHRB; December 03, 2012 – August 31, 2016; Total funding: $248,960; Role: PI

SELECTED PUBLICATIONS

- **Total: over 400 peer reviewed publications and over 400 presentations**
- Sourav, A., Mahedi, M., **Ceylan, H.**, Kim, S., Brooks, C., Peshkin, D., Dobson, R., and Brynick, M. (2022). "*Evaluation of Small Uncrewed Aircraft Systems Data in Airfield Pavement Crack Detection and Rating*," Transportation Research Record: Journal of the Transportation Research Board, https://doi.org/10.1177/03611981221101030
- Gopisetti, L. S. P., **Ceylan, H.**, Cetin, B., and Kim, S. (2021). "*Assessment of Satellite-based MERRA Climate Data in AASHTOWare Pavement Mechanistic-Empirical Design*," the Journal of Road Materials and Pavement Design, https://doi.org/10.1080/14680629.2021.2009010.
- Hamim, A., Yusoff, N. I. M., **Ceylan, H.** et al. (2020). "*Integrated Finite Element and Artificial Neural Network Methods for Constructing Asphalt Concrete Dynamic Modulus Master Curve Using Deflection Time-History Data*," Construction & Building Materials, Vol. 257, Article Number:119549.
- Rezaei-Tarahomi, A., Kaya, O., **Ceylan, H**., Gopalakrishnan, K., Kim, S., and Brill, D. R. (2020). "*ANNFAA: Artificial Neural Network-based Tool for the Analysis of Federal Aviation Administration's Rigid Pavement Systems*," International Journal of Pavement Engineering, DOI: 10.1080/10298436.2020.1748627.
- Kaya, O., **Ceylan, H.**, Kim, S., Waid, D., and Moore, B (2020). "*Statistics and Artificial Intelligence Based Pavement Performance and Remaining Service Life Prediction Models for Iowa Flexible and Composite Pavement Systems*," Transportation Research Record: Journal of the Transportation Research Board, Vol. 2674, Issue 10, pp. 448-460.
- **Ceylan, H**., Bayrak, M. B., and Gopalakrishnan, K. (2014) "*Neural Networks Applications in Pavement Engineering: A Recent Survey*," the International Journal of Pavement Research and Technology, Vol. 7, Issue 6, pp. 434-444

PROFESSIONAL AFFILIATIONS, HONORS, AND SERVICE

- Member of more than 30 national and international committees and organizations, editorial board member for nine international journals, 19 track organizer/chair, presided 49 sessions, 23 other professional activities (including international advisory committees), 25 services to Iowa State University since August 2002.

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

- 66 Graduate Students/Thesis Advised; currently, 11 Ph.D. students and 1 Master's Student advising as Major or Co-Major professor (As of Summer 2023); 16 Postdoctoral scholars/ Professional Staff Supervised

AWARDS, RECOGNITIONS

- 2022 Class of Distinguished Member, American Society of Civil Engineers (ASCE)
- 2021 ASCE James Laurie Prize