Anuj Sharma, PhD

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IOWA STATE UNIVERSITY
Institute for Transportation

EDUCATION

- PhD, Civil Engineering, Purdue University, 2008
- M. S., Civil Engineering, Texas A&M, 2004
- B. E, National Institute of Technology, Rourkela, India 2001

PROFESSIONAL EXPERIENCE

- Professor, Civil Engineering Iowa State University (ISU), 2022–present
- Associate Professor, Civil Engineering, Iowa State University (ISU), 2014–2022
- Assistant Professor, Civil Engineering. University of Nebraska Lincoln, 2008–2014

SELECTED RESEARCH PROJECTS

- "Study for Large Scale Automation of Wrong Way Detection using Existing CCTV Cameras." PI, Iowa DOT, 2022-2024
- "Navigation System for Snowplows in Low Visibility Situations" PI, Iowa DOT 2021-2024
- "A Scalable Cloud-Edge Enable Driving and Activity Monitoring Platform: A Pilot Study." PI, Toyota, 2021-2022
- "End-to-end Pipeline for Multi-Sensor Data Collection with the Toyota Avalon," PI, Toyota, 2019-2020.
- "Deep Insight – Deep-net driven approach to estimate driver state from naturalistic data," PI, FHWA-EAR. 2019-203

SELECTED PUBLICATIONS

- Naphade, M., Wang, S., Anastasiu, D.C., Tang, Z., Chang, M.C., Yao, Y., Zheng, L., Rahman, M.S., Arya, M.S., **Sharma, A**. and Feng, Q., 2023. The 7th AI City Challenge. In *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition* (pp. 5537-5547).
- Udita Jana, Jyoti Prakash Das Karmakar, Pranamesh Chakraborty, Tingting Huang, **Anuj Sharma**, "*Automated Approach for Computer Vision-based Vehicle Movement Classification at Traffic Intersections,*" Automated Approach for Computer Vision-Based Vehicle Movement Classification at Traffic Intersections, Future Transportation 2023, 3(2), 708-725 (2023)
- Archana Venkatachalapathy, Mohammed Shaiqur Rahman, Aditya Raj, Jennifer Merickel, **Anuj Sharma**, Jiyang Wang, Senem Velipasalar, "*DEEP INSIGHT: A Cloud Based Big Data Analytics Platform for Naturalistic Driving Studies,*" accepted for publication in International Journal of Automotive Engineering (2023)

- Saeed Arabi, **Anuj Sharma,** Michelle Reyes, Cara Hamann, and Corinne Peek-Asa, *"Farm Vehicle Following Distance Estimation Using Deep Learning and Monocular Camera Images,"* Sensors, 22(7), 2736, https://doi.org/10.3390/s22072736 (2022)
- Arya Haghighat and **Anuj Sharma**, *"A Scalable Deep Model to Detect Wrong-Way Driving Using Traffic Cameras,"* Computer-Aided Civil and Infrastructure Engineering. Vol 38 (1). (2023)

PROFESSIONAL AFFILIATIONS, HONORS, AND SERVICE
- ITS Heartland Academic Director, 2023-present
- TRB Traffic Signal System's Committee voting member, 2014-present
- Journal of Big Data Analytics in Transportation (Springer-Nature), Co-Editor in Chief, 2018-2021
- CVPR-workshop AI-City Challenge, 2018-2020, Committee