Ishita Dash is a Research Assistant Professor in the Department of Civil and Environmental Engineering at Vanderbilt University. Her expertise is in transportation safety, with a particular focus on pedestrian and bicycle safety. Dr. Dash employs advanced machine learning algorithms, computer vision techniques, and data analytics to analyze large datasets collected from various sensors, technologies, and cameras. By identifying unsafe travel behaviors and their underlying causes, she aims to develop innovative, efficient, sustainable, and safer transportation systems.

Her research also explores the environmental impacts of traffic, the stress experienced by pedestrians and cyclists, heat-induced stress on construction workers, and the stress encountered by first responders. These studies seek to improve both performance and health outcomes. The implications of her work are significant for policymakers, urban planners, and transportation engineers.

Dr. Dash holds a Ph.D. and an M.S. in Civil Engineering from Vanderbilt University, as well as an M.S. in Reliability, Availability, Maintainability, and Safety from the Norwegian University of Science and Technology in Norway. She earned her B.S. in Marine Engineering from the Birla Institute of Technology and Science in India.

In addition to her research, Dr. Dash has extensive teaching experience. She has instructed courses in Energy Systems Engineering at Vanderbilt University, successfully developed and implemented a data analytics certification and minor program, and taught Business Statistics as an Adjunct Professor at Colorado Mountain College. Furthermore, she has taught Urban Transportation and Data Analytics at the PTY Summer 2024 (VSA and Career Connections) program. She has served as a guest lecturer and teaching assistant for several courses at Vanderbilt University and has worked as a mathematics tutor for the Accelerating Scholars Program at Metro Nashville Public Schools.

With over a decade of experience as a Technical Safety Engineer in the Offshore and Shipping industry, Dr. Dash brings significant practical expertise to her academic and teaching endeavors.