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## SHORT BIO:

**Adriana Martínez-Hernández** received her B.Eng. in Mechatronics Engineering from the National Autonomous University of Mexico (UNAM), and her M.Sc. and Ph.D. degrees in Electrical Engineering, specializing in Instrumentation and Digital Signal Processing, respectively. During her graduate studies at the Bioinstrumentation Laboratory and the Technological Development and Innovation Unit (UIDT) of ICAT, she developed inertial sensor–based systems for three-dimensional human motion tracking. She subsequently completed a postdoctoral fellowship focused on motion analysis in individuals with musculoskeletal disorders. Since 2023, she has been a full-time faculty member at the Institute for Applied Research and Technology (InIAT) at Universidad Iberoamericana, where she leads the Prosthetics and Orthotics Laboratory.

Her current research focuses on human motion analysis for the identification of movement patterns under different clinical conditions, including pre- and post-surgical assessment and rehabilitation monitoring. She develops technology-driven solutions for rehabilitation and disability applications, integrating body kinematics, inertial sensing, and biopotential signals. Her work aims to provide clinicians with quantitative tools for mobility assessment and therapy design, with an emphasis on portable, cost-effective, and clinically relevant systems.