Jorge J. Ortiz

Associate Professor (with Tenure) • Electrical and Computer Engineering
Director, Sensing and Reasoning (SnR) Lab

Rutgers University

jorge.ortiz@rutgers.edu • jorgeortizphd.info • 617-784-6550

Education

Ph.D., Computer Science *2013*
University of California, Berkeley

M.S., Computer Science *2010*
University of California, Berkeley

B.S., Computer Science *2003*
Massachusetts Institute of Technology

Academic Appointments

Associate Professor (with Tenure) *Sept. 2025 – present*
Rutgers University

Assistant Professor *Sept. 2018 – 2025*
Rutgers University

Research Leadership

Director, Sensing and Reasoning (SnR) Lab *Sept. 2018 – present*
Rutgers University

Industry Experience

AI and Computer Vision Lead, Baseball Operations *Dec. 2019 – present*
New York Yankees

Research Staff Member *Dec. 2013 – Aug. 2018*
IBM Research

Research Areas

Multimodal Learning and AI • Human-Computer Interaction • IoT and Smart Environments
Computer Vision and Sensing • Machine Learning Applications

Key Honors & Recognition

- **Judge**, Newsweek AI Impact Awards 2025
- **Keynote Speaker**, Workshop on Smart and Connected Indoor Environments (IEEE SECON 2017)
- **Best Paper Awards**: ICISSP 2018, **Best Paper Finalists**: IoTDI 2019, BuildSys 2015 (2x)
- **Invited Panelist**: JPMC Hispanic Heritage Month Tech Panel, Sports and AI Symposium (Columbia)

- NSF Graduate Fellowship Honorable Mention, Qualcomm Innovation Fellowship Finalist

Major Grants & Funding ($6.9M+)

- **NSF ReDDDoT Phase 2**: Urban AI in Harlem, Co-PI **($1.45M)**
- **NIH CAMERA Platform**: Development, Co-PI **($1.08M)**
- **NSF Engineering Research Center**: Smart Streetscapes, Site PI **($2.3M)** Rutgers portion of $26M
- **NSF IUCRC**: Standards and Ethics in AI, PI **($20K)**

Selected Publications

- **J. Ortiz** et al., "DeviceMien: Network Device Behavior Modeling for Identifying Unknown IoT Devices," *ACM IoTDI*, 2019. **[Best Paper Finalist]**
- M. Aldeer, **J. Ortiz**, et al., "PatientSense: Patient Discrimination from in-Bottle Sensors Data," *ACM MobiQuitous*, 2019.
- Y. Sun, N. Salami Pargoo, P. Jin, **J. Ortiz**, "Optimizing Autonomous Driving for Safety: A Human-Centric Approach with LLM-Enhanced RLHF," *ACM UbiComp Companion*, 2024.
- Z. Hussain et al., "Non-Invasive Techniques for Monitoring Different Aspects of Sleep: A Comprehensive Review," *ACM Trans. Computing for Healthcare*, 2022.
- D. Hong, H. Wang, **J. Ortiz**, K. Whitehouse, "The Building Adapter: Towards Quickly Applying Building Analytics at Scale," *ACM BuildSys*, 2015. **[Best Paper Finalist]**
- A. Bhattacharya et al., "Automated Metadata Construction to Support Portable Building Applications," *ACM BuildSys*, 2015. **[Best Paper Finalist]**

Students & Mentoring

Ph.D. Graduates: Tahiya Chowdhury (2022), Murtadha Aldeer (2023), Tong Wu (2023)

Research Focus: Human activity sensing, multimodal learning, IoT behavior understanding

Selected Professional Service

- **Leadership:** Steering Committee Chair BuildSys (2024-25), General Chair BuildSys (2022)
- **2025 TPC:** ACM MobiHoc, Sensys, Buildsys, ICLR
- **Major Workshops:** NeurIPS 2021 Deep Learning & Differential Equations (Organizer)
- **Conference Organization:** CPS-IoT Week 2019 Publication Chair (5 conferences)

Patents

12+ issued patents in IoT, sensing, and machine learning applications