

Physical Human-Robot Interaction

Sensory augmentation for mobility assistance

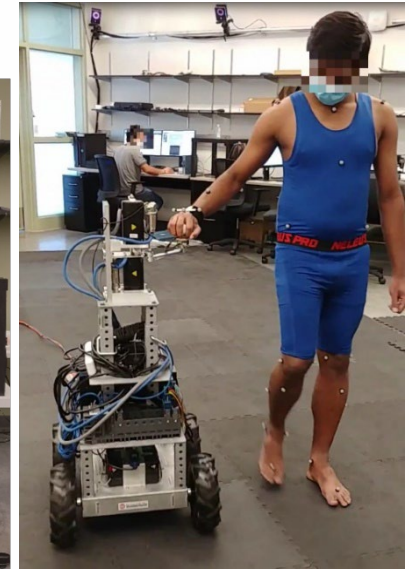
- Investigation of light interaction forces as means for effective motor communication
- Using virtual touch for postural stability

Human-like interactive robots

- Development of specialized robot for studying physical human-robot interaction
- Investigation of motor communication strategies for intuitive physical interaction

Rehabilitation robotics

- Motorized walking aide for older adults
- Physical assistance from smart environment



Safe, intuitive and effective physical interaction between humans and robots

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Funding

- National Science Foundation (Mind, Machine and Motor Nexus – M3X)

Keywords

- Physical human-robot interaction, rehabilitation robotics, sensory augmentation

Recognitions

- PBS News Hour, "These stairs recycle your energy so they're easier to climb" (2016)
- Faculty Teaching Award (2019)
- National Science Foundation CAREER award (2021)