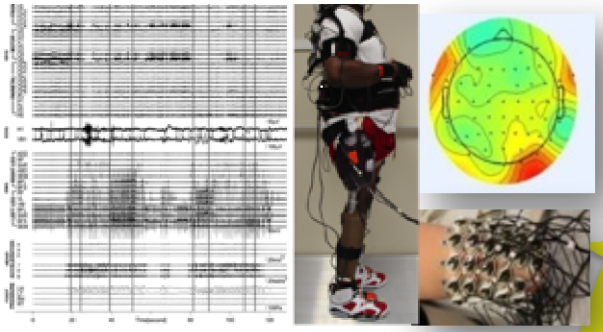
Neural-machine interfaces

Efficient neural information transfer between man and machine

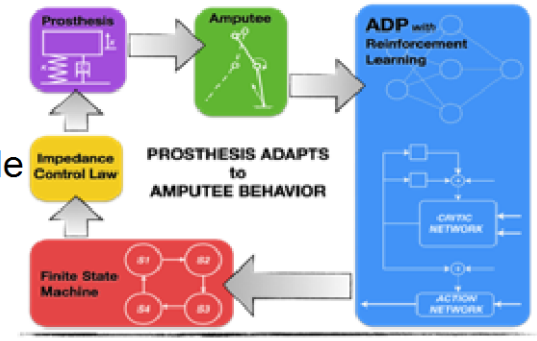
User intent recognition

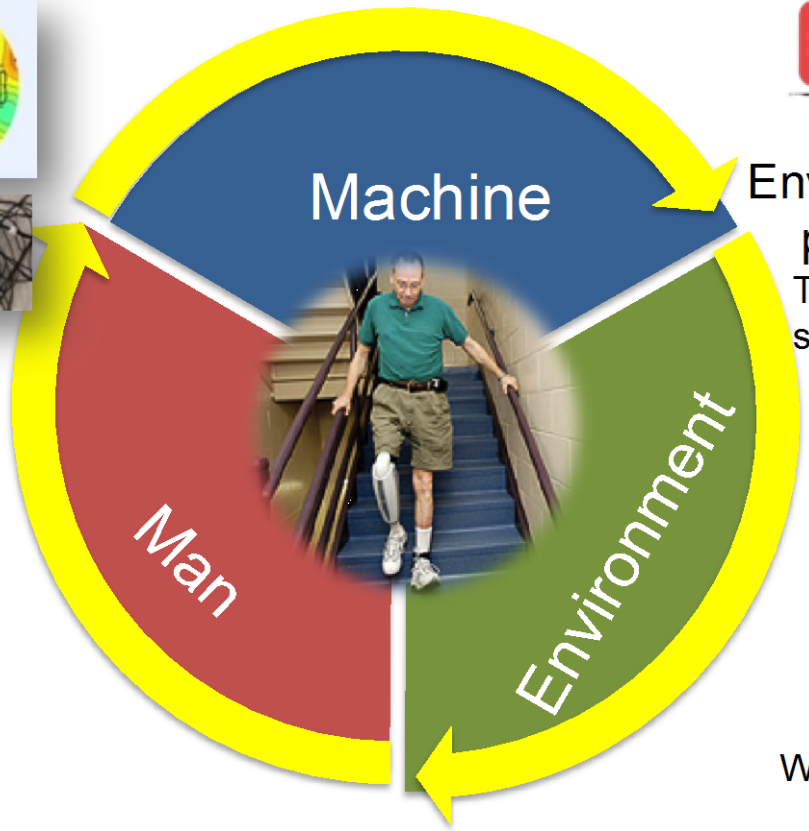


Man-machine Interactions

Man-Machine co-adaptation

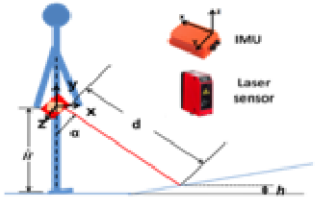
Optimal and adaptive control of wearable robots (prosthetics and orthotics)





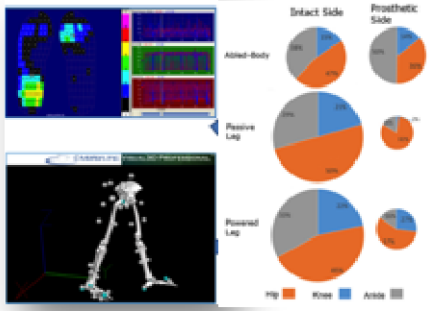
Environment-aware robotic prosthetics and orthotics

Terrain Recognition, wearable sensors, smart prostheses



Biomechanics

Energy transfer among man, machine, and environment



Research-technology translation

Patent application

Working with patients, clinicians, and industrial partners

Neuromuscular Rehabilitation Engineering Laboratory PI: He (Helen) Huang

Research goal: Improve quality of life of individuals with physical disabilities

Education goals: Train next-generation leaders in Rehabilitation Engineering and promote STEM to underrepresented groups

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