



# Monitoring Human Performance with Wearable Accelerometers

## Motivation:

Human-observer based methods for measuring human motion are labor intensive, and difficult to standardize across clinical settings or over time.

Many medical conditions are monitored only via short visits to the clinician.



Predicting risk of errors in gait



Parkinson monitoring



Exercise quality assessment for Knee osteoarthritis

## Contributions:

- Cyber physical systems for improved medical diagnosis and treatment monitoring
- Several data collections underway (lab, assisted living)
- New algorithms for time series classification

## Impact:

Continuous and quantitative monitoring and evaluation of treatment at home.