

GOAL:

sEMG-based fatigue estimation for exoskeleton control

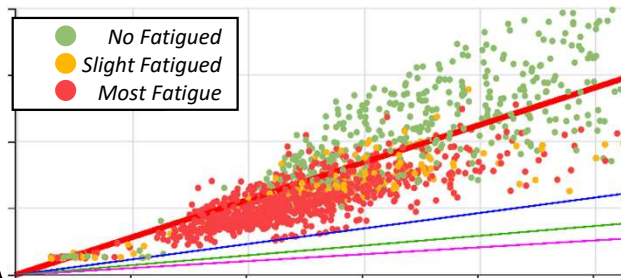
Target Muscles:
Flexor digitorum superficialis,
Extensor digitorum



Prior Work:

Novel fatigue estimation algorithm developed and validated in human trials

$$V = W \cdot H$$
$$\|V - W \cdot H\|$$



Pending Steps:

- Design and fabricate a robotic testbed for control validation
- Develop sEMG-based control modes for hand grasp assistance
- Instrument and control with sEMG



e.g. NASA Spacesuit RoboGlove exoskeleton, not EMG controlled