UNIVERSITY OF GENOA
DEPARTMENT OF INFORMATICS, BIOENGINEERING, ROBOTICS AND SYSTEMS ENGINEERING
MASTER'S PROGRAM IN BIOENGINEERING

Thesis Project Form

Title (tentative): Evaluating the influence of cognitive and physical demands on wrist proprioception and fatigue

Thesis advisor(s): Casadio Maura, Jacopo Zenzeri (ReWing) Michael Holmes (Brok University)

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Description

Motivation and application domain

ehabilitation Robotics. Ergonomics. NeuroMechanics: Neural control of the hand, Forearm muscle fatigue and performance, Sensorimotor assessment of hand function

General objectives and main activities

The aim of the thesis is the development of a cognitive and physical loading paradigm to fatigue the neuromuscalar system and to develop sensorimotor evaluations of wrist function

Training Objectives (technical/analytical tools, experimental methodologies)

Programming of wrist robotic device for study design. Recruitment, data collection, processing and analysis. Integrating electromyography and other signals with robot.

Place(s) where the thesis work will be carried out: Brock University: Department of Kinesiology; Neuromechanics and Ergonomics Lab.

Additional information

Maximum number of students: 2

Financial support/scholarship: possibility to apply to extra eu scholarship