
OBJECTIVE

Phd, Biomedical Engineer

EXPERIENCE

Rome, Italy

February 2019 - Present

Research fellow

Department of Mechanical and Aerospace Engineering Sapienza, University of Rome

Design and development of tests and protocols for dynamic posturography with robotic platforms. Design and development of novel techniques for measuring human kinematics and kinetics with wearable sensors. Dynamic stability measurement and analysis of muscle synergies in the elderly and patients with Parkinson's disease. Ergonomics evaluation of biomechanical risk with wearable system. Tutor of Biomechanics (Biomedical Engineering), Industrial Measurements (Mechanical Engineering), Mechanical and Thermal Measurements (Mechanical Engineering and Clinical Engineering)

Newark, New Jersey,
United States

June 2019 - August 2019

Visiting Researcher

Department of Biomedical Engineering New Jersey Institute of Technology

Robotics-like stability study for predicting balance impairments in the idiopathic Parkinsonism Data analysis with Matlab and Visual studio Balance stability boundary, center of mass state space, constrained dynamics.

Rome, Italy

November 2015 - January 2019

PhD in Industrial and Management Engineering

Department of Mechanical and Aerospace Engineering Sapienza, University of Rome

Validation and evaluation of the WAKE-up exoskeleton for gait rehabilitation in children with neurological diseases. Design and application of methods for 3D motion analysis through wearable sensors. Gait phases detection by means of machine-learning algorithm. Auditory cued gait-analysis in patients with neurological diseases. Dynamic posturography through robotic platform. Tutor of Biomechanics (Biomedical Engineering), Industrial Measurements (Mechanical Engineering), Mechanical and Thermal Measurements (Mechanical Engineering and Clinical Engineering)

Berlin, Germany

June 2018 - August 2018

Visiting Researcher

Department of Sport Sciences Humboldt-Universität zu Berlin

Design and management of experimental protocols. Data acquisition with opto-electronic system (VICON), data analysis with Matlab Motor Control, Motor Learning, Locomotion and Muscle Synergies

EDUCATION

Rome, Italy

2015

Master's Degree in Biomedical Engineering

Sapienza, University of Rome

Biomechanics, Biomedical Instrumentation, Bioelectromagnetic Interaction, Data and biomedical signals processing, Analysis of complex biosystems, Radioprotection

Rome, Italy

2013

Bachelor Degree in Clinical Engineering

Sapienza, University of Rome

Biomedical Instrumentation, Measurements for clinical diagnostics, Models of biological systems, Automatic, Data processing, Hospital plants
