

Tommaso Benigni

· benignitommaso@gmail.com

Education:

Ph.D in Biomedical Engineering

University of Arkansas

Graduation: December 2023

Bachelor of Science in Biomedical Engineering

Minor in Mechanical Engineering

Florida International University, Miami FL

Graduation: May 2016

Skills:

- Matlab, Python, C, Solidworks, Minitab, R
- Graphic User Interface development
- Soldering, 3D printing, Circuit Design and Testing
- Fluent in Italian, English, and Spanish
- Skilled in: Microsoft Word, Excel, PowerPoint,

Research experience:

Research assistant in the Adaptive Neural Systems Lab

Summer 2019- Current

- Presented posters at three significant conferences:
 - Benigni, Tommaso R, *et al.* “Verification of a Sensorized Dexterous Prosthetic Hand for Use with a Neural Enabled Prosthesis,” in *Military Health System Research Symposium*, MHSRS-21-04297, 8 June 2021.
 - Benigni, Tommaso R, *et al.* Decoding Recordings of Extracellular Activity from Longitudinal Intrafascicular Electrodes to Control a Prosthetic Hand”, Program No. 556.08. 2021 Neuroscience Meeting Planner. Society for Neuroscience, 2021. Online Abstract #2740
 - Benigni, Tommaso R, *et al.* “Altering the Burst Period In Peripheral Neuromodulation Can be used to Perform a Matching Task” ,” in *Military Health System Research Symposium*, MHSRS-23-09595, August 2023

Research assistant in the Neural Mass Dynamics Lab

Spring 2015 - Spring 2016

- Presented a poster of my research: “Creating a Platform for Combining Wireless Electrophysiological Signals and Physiological Responses,” at the national BMES conference

Mentorship:

Spring 2019 - Current

- Mentored underrepresented high school students as part of the Army Educational Outreach Program (AEOP). Where they created a wrist-wearable tactile stimulator
- Trained underrepresented undergraduate students with software development of a testing platform for the characterization of commercial prosthetics
- Mentored University of Arkansas undergraduate students in developing software methods for aggregating and downsampling sensor signals from commercial prosthetics.

Community Outreach:

Spring 2021 - Current

- Led and taught online lecture series to support groups for people with amputations, focusing on Neurophysiology, prosthetic technology, post-amputation pathology, Sensory feedback systems, and Virtual reality