

USF NEXUS INITIATIVE 2018 AWARD RECIPIENT

Stephanie Carey

Robotic Framework for Bipedal Locomotion Benchmarking

The goal of this project is to create a benchmarking framework for robotic systems such as prosthetic and orthotic devices, exoskeletons, and humanoids. This framework will allow companies and researchers to test the performance of robotics technologies at any stage of development. Currently, a consortium of partners across Europe led by Dr. Diego Toricelli in Madrid contribute to the framework. I will expand this consortium to include the University of South Florida. USF's motion analysis capabilities, including the CAREN virtual reality system with an instrumented treadmill, will aid in the databases and benchmarking metrics need for the framework.

Partnerships:

Diego Toricelli, Ph.D.

Neural Rehabilitation Group, Cajal Institute Spanish Research Council (Madrid, Spain)

Jose Pons, Ph.D.

Neural Rehabilitation Group, Cajal Institute Spanish Research Council (Madrid, Spain)



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