Mocap system for 6MW and TUG short walk tests

Mário Sandro F da Rocha, A A de Oliveira and **F M Bersotti**
University São Paulo University, Brazil

Precise measurements of spatial orientation place an important role in human movement analysis. In this work we present a new inertial motion capture system (Mocap) with an interface designed for physical therapist or physiotherapist, or more specifically, for the six-minute walk (6MW) and timed-up-and-go (TUG) short walk tests, which are among the most largely used by physical therapists or physiotherapists as assessment tools for physical function and clinical performance. It will be shown a quick overview about the main Mocap technologies, why our inertial system can be one critical tool to get accurate data on what the bodies are doing, and how it would be useful in physiotherapy; Financial Suporte: FAPESP.

Biography

Mário Sandro F da Rocha received his BSc, MSc and PhD in Physics from São Paulo University in 1987, 1996 and 2001 respectively. From 2001 to 2004 he worked as a Postdoctoral Researcher in the Dosimetry Laboratory at Institute of Physics of São Paulo University. From 2005 to 2007 he was a Fellowship Researcher in display technologies at CTI Renato Archer, Campinas, SP, where up to 2015 developed several projects in the areas of ICT and motion capture using infrared cameras. In 2016, he started developing a project of a inertial motion capture system for applications in physiotherapy, which was selected to get the financial support of the public foundation FAPESP, funded by taxpayers in the state of São Paulo. Currently, he is one of the partners of the company Mocap Brazil.

msandro_rocha@hotmail.com

Notes: