



Workshop on Data-Driven Decision Making

8th October 2018 h 9-13 — Università degli studi di Pavia, Room III

The aim of the workshop is to explore the different aspects of data-driven decision-making in the field of assistive robotics and its interaction with legal regulations. The application of robotics, autonomous systems and AI to medicine may improve the process of diagnosis, care and even rehabilitation. These new complex technologies produce a huge amount of data that requires new statistical approaches such as Big Data Mining and Analysis. This workshop will address these issues in a highly interdisciplinary scenario. Among the area of application in medicine there are: Telemedicine (which allows the presence for immediate assistance to patients with chronic diseases living in remote places far from the hospitals), Sensor technology (e.g. the electronic nose device that has received relevant attention due to the applications in research and applied sciences), Surgical Assistants (remote-controlled robots that support surgeons with performing operations), Rehabilitation Robots designed with the aim to improving motor functions including coordination, postural control, and mobility into the environment, also using virtual reality systems and more). All these systems imply the collection of huge quantity of data and the exploration of such big data accumulation through algorithms which produce evidence for further decision: i.e. data-driven decision making.

Data-driven decision making in the field of assistive robotics and its interaction with legal regulations.

Opening speech

Amedeo Santosuosso — *Università degli studi di Pavia*

with

Riccardo Bellazzi — *Università degli studi di Pavia*
Gabriella Bottini — *Università degli studi di Pavia*
Giorgio Metta — *IIT Genova*
Giulia Pinotti — *Università degli studi di Milano*
Francesca Lagioia — *European University Institute*
Frederike Seitz — *University of Hannover*
Tamar Sharon — *Maastricht University*
Paul Vogel — *Wuerzburg University*
Nicolas Woltmann — *Wuerzburg University*

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