

BONNET Vincent (French, 20/04/1983), PhD in Automatic Control and Robotics,

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Associate professor at the University of Paris-Est-Créteil, Créteil, France at the LISSI (Laboratory of Images Signal and Intelligent Systems).

Research focuses: 1) the development of new methodologies for the identification of human and robot inertial segment parameters, and 2) the development of an inverse optimal control framework handling multi-contact cases for understanding human motion in the context of industrial ergonomics and of clinical rehabilitation.

Education and research

- 2013:2016 **3 years post-doctoral fellowship in robotics** with the department of mechanical systems engineering, Tokyo, **Japan**, University of Agriculture and Technology funded by the Japan Society for Promotion of Science (**JSPS**).
- 2013: **Qualification** at the French National University Committee in the sections **61** (Informatics, control and signal processing) and **74** (Sport Sciences).
- 2012-2013: **Temporary Assistant Professor** at the University of Montpellier 1, Movement to Health Laboratory, EUROMOV Institute.
- 2010-2012: **2 years post-doctoral fellowship in biomechanics/bioengineering** with the LABLAB at the University "Foro Italico" Roma 4, **Italy** under the supervision of Prof. A. Cappozzo.
- 2010: **Post-doctoral fellowship in humanoid robotics** with the LIRMM, Montpellier, France.
- 2006-2009: **Ph.D** (Modeling of the human postural coordination) at **1**LIRMM and **2**M2H in Montpellier (France), supervised by Prof. P. Fraisse**1** and Prof. B. Bardy**2**.
- 2006: **M.S in Robotics** at the University of Montpellier II, with honors. Thesis: Two arms force/position control of HRP-2 humanoid robot supervised by Prof. P. Fraisse.

Publications

Interdisciplinary publications in more than 20 journals (IEEE transactions on Robotics, IEEE Transactions on Neural Systems & Rehabilitation Engineering, Journal of Biomechanics, Robotics and Autonomous Systems, IEEE Transaction on Biomedical Engineering, IEEE Sensors, ...) and 30 international conferences (IROS, EMBC, ICRA, BIOROB...).

Teaching

Teaches in various inter-disciplinary topics such as **biomechanics**, **control**, **research methodology**, **electronics**, **robotics** or basic **computer science** at undergraduate and graduate level. Over the years I (co)supervised about 30 students (including 1 Ph. D student).

Grants/honors:

- -二国間交流 Bilateral program **MAEDI-JSPS grant** (PHC Sakura n°34192 RL) for 2015 and 2016.
- 2014-2016: Long-term award post-doctoral fellowship of 2 years from the Japanese Society for the

Promotion of Science (JSPS, No 14768) including scientific financial support.

- 2015: Financial support (2k\$) for technological transfer from laboratory to industry of NaturalPad start-up company (France).
- 2013-2014: Short-term award post-doctoral fellowship of 1 year from JSPS (No 13559).
- 2013: **Novartis laboratories**: development of the mobile gait analysis platform (8k\$).
- 2011-2014: Full financial support for 3-years of PhD of the student Nahema Sylla (100k\$) from French car manufacturer PSA Peugeot Citroën.
- 2010-2012: PHC Egide Galileo project n°26078TE 2 years: mobility grant between France and Italy.
- 2006-2009: University of Montpellier 2 Ph.D fellowship award.