europass Curriculum Vitae

PERSONAL INFORMATION

Daniele Bibbo

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Sex Male | Date of birth 30/11/1976 | Nationality Italian

WORK EXPERIENCE

01/12/2010–Present

Research Engineer

Department of Engineering - Università degli Studi Roma tre, Rome (Italy)

01/02/2007–30/11/2010

Postdoctoral researcher

Università degli Studi Roma Tre, Rome (Italy)

EDUCATION AND TRAINING

01/01/2004–31/12/2006

Philosophy doctorate

Alma Mater - Univeristà degli Studi di Bologna, Bologna (Italy)

Bioengineering

01/10/1995–31/05/2003

M.Sc. (Laurea)

Università degli Studi Roma Tre, Rome (Italy)

Mechanical Engineering

PERSONAL SKILLS

Mother tongue(s): Italian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	C2	C1	C1	C1
French	A2	B1	A2	A2	A2
Spanish	B1	B1	B1	A2	A2
German	A1	A1	A1	A1	A1

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2: Proficient user
Common European Framework of Reference for Languages

Computer skills

Operating Systems: Windows, Mac OSX, Linux.

Software National Instruments Labview from version 5.0 to last release.

Software Microsoft Visual Studio.

Applications: Office, Matlab, National Instruments Applications, Dassault Systemes Catia, Autocad, Solid Edge, Corel applications, Adobe Photoshop,Altium Designer Protel, Orcad.

Languages for Microchip PIC and DS-PIC, ATMEGA, Freescale and Texas Instruments

microcontroller programming and firmware design.

Other skills

Use of instrumentation for the measurement of biomedical and biomechanical parameters for tests on patientsboth in the laboratory and on the field context.

Prototyping of printed circuit boards for microelectronics, from the design to the assembly.

Use of laboratory equipment for mechanical and electrical measurements.

Prototyping of mechanical components from the design to the realization using machining.

Related document(s):

ADDITIONAL INFORMATION

Publications

Publication on International Journals

- M. Watson, D. Bibbo, C. R. Duffy, P. E. Riches, S. Conforto, and A. Macaluso. Validity and reliability of an alternative method for measuring power output during 6 s all out cycling. Journal of Applied Biomechanics. *Accepted for pubblication*.
- C. De Marchis, M. Schmid, D. Bibbo, A.M. Castronovo, T. D'Alessio, S. Conforto. Feedback of mechanical effectiveness induces adaptations in motor modules during cycling. Frontiers in Computational Neuroscience, 7(35): 1-12, 2013
- A.M. Castronovo, S. Conforto, M. Schmid, D. Bibbo, T. D'Alessio. How to assess performance in cycling: the multivariate nature of influencing factors and related indicators. Frontiers in Physiology, 4(116): 1-10, 2013
- C. De Marchis, M. Schmid, D. Bibbo, I. Bernabucci, S. Conforto. Inter-individual variability of forces and modular muscle coordination in cycling: A study on untrained subjects. Human Movement Science, http://dx.doi.org/10.1016/j.humov.2013.07.018: , 2013
- M. Schmid, F. Riganti-Fulginei, I. Bernabucci, A. Laudani, D. Bibbo, R. Muscillo, A. Salvini, S. Conforto. SVM versus MAP on accelerometer data to distinguish among locomotor activities executed at different speeds. Computational and Mathematical Methods in Medicine, 2013: Article ID 343084, 2013
- D. Bibbo, S. Conforto, C. Gallozzi, T. D'Alessio. Combining electrical and mechanical data to evaluate muscular activities during cycling. WSEAS Transactions on Biology and Biomedicine, 3: 339-346, 2006
- M. Schmid, S. Conforto, D. Bibbo, T. D'Alessio. Respiration and postural sway: detection of phase synchronizations and interactions. Human Movement Science, 23: 105-119, 2004

Publication on International Congress Procedings

- C. D'Anna, D. Bibbo, M. Goffredo, M. Schmid, S. Conforto. Efficacy of TtB-Based Visual Biofeedback in Upright Stance Trials. XIII Mediterranean Conference on Medical and Biological Engineering and Computing 2013, Sevilla, Spain: September 25-28, 2013
- A.M. Castronovo, C. De Marchis, D. Bibbo, S. Conforto, M. Schmid, T. D'Alessio. Neuromuscular Adaptations during Submaximal Prolonged Cycling. Proceedings of the 34th IEEE-EMBS Conference, San Diego: 28 Aug - 1 Sep, 2012
- C. De Marchis, A.M. Castronovo, D. Bibbo, M. Schmid, S. Conforto. Muscle Synergies are Consistent when Pedaling under Different Biomechanical Demands. Proceedings of the 34th IEEE-EMBS Conference, San Diego: 28 Aug - 1 Sep, 2012
- D. Bibbo, S. Conforto, I. Bernabucci, M. Carli, M. Schmid, T. D'Alessio. “Analysis of different image-based biofeedback models for improving cycling performances” Proceedings of IS&T/SPIE 2012, 8295A.
- A.M. Castronovo, C. De Marchis, G. Severini, D. Bibbo, T. D'Alessio. ”Electromyographic features for the characterization of task failure during submaximal cycling” World Congress on Medical Physics and Biomedical Engineering, Beijing, China: May 26-31, 2012.
- D. Bibbo, S. Conforto, I. Bernabucci, M. Schmid, T. D'Alessio. “A wireless integrated system to evaluate efficiency indexes in real time during cycling” EMBEC '08, Antwerp, Belgium: November 23-27, 2008

- S. Conforto, S.A. Sciuto, D. Bibbo, A. Scorza. “Calibration of a measurement system for the evaluation of effectiveness index in bicycle training” EMBEC '08, Antwerp, Belgium: November 23-27, 2008
- F. Censi, S. Conforto, D. Bibbo, “Heart rate variability analysis during bicycle ergometer exercise”, 19th international conference BIOSIGNAL 2008, Brno, Czech Republic June 29 - July 1, 2008.
- R. Muscillo, D. Bibbo, M. Schmid, “A combination of template matching and Bayesian estimation to detect and classify activities of daily living”, 19th international conference BIOSIGNAL 2008, Brno, Czech Republic June 29 - July 1, 2008.
- Conforto S., Schmid M., Bibbo D., D’Alessio T., “Assessment of muscular status froma surface electromyography during Dynamic protocols” proceedings of the 17th ISEK Congress, Niagara Falls, Ontario, Canada, 18-21/06/2008.
- Conforto S., Bibbo D., D’Alessio T., “A maximum likelihood approach for the detection of muscular activation timing” proceedings of the 17th ISEK Congress, Niagara Falls, Ontario, Canada, 18-21/06/2008.
- Watson M., Bibbo D., Duffy C., Riches P., D’Alessio T., Macaluso A., “Validity and reliability of a novel method for measuring maximal power output during 6-s all-out single legged actions on a frictionally-braked cycle-ergometer”, proceedings of 12th Annual Congress of the ECSS, 11–14 July 2007, Jyväskylä, Finland.
- Conforto S, Mathieu PA, Schmid M, Bibbo D, Florestal JR, D'Alessio T., “How Much Can We Trust the Electromechanical Delay Estimated by Using Electromyography?”, proceedings of the IEEE-EMBS 2006 Conference, September 1-4, 2006, New York City, New York.
- Bibbo D., Conforto S., Gallozzi C., D’Alessio T., “How do muscles contribute to cycling?” procedings of 7th WSEAS conference on Automation & Information, 13-15/06/2006 - BEST STUDENT PAPER AWARD in the 7th WSEAS International Conference on AUTOMATION & INFORMATION (ICAI'06).
- Bibbo D., Schmid M., Conforto S., “A wireless instrumented pedal to measure force during cycling”, proceedings of XVI ISEK Congress, 28-30/06/2006, Torino , Italy.
- Caselli P., Bibbo D., Schmid M., and D’Alessio T. “A wireless intelligent sensor for real time ADL monitoring”, proceedings of XVI ISEK Congress, 28-30/06/2006, Torino , Italy.
- Caselli P., Bibbo D., Schmid M., and D’Alessio T. “A novel integrated system for patient home monitoring”, proceedings of XVI ISEK Congress, 28/30/06/2006, Torino , Italy.
- S. Conforto, D. Bibbo, M. Schmid, T. D'Alessio, “Muscular Fatigue from Electromyographic Recordings: Real-Time Monitoring during Exercise Training”, proceedings of 3rd European Medical and Biological Engineering Conference IFMBE, 20-25/11/2005, Praha, Czech Republic.
- M. Schmid, S. Conforto, G. Calcagnini, D. Bibbo, T. D'Alessio, “Dynamometry as a Mean to Non-invasively Estimate Cardiac Output”, proceedings of 3rd European Medical and Biological Engineering Conference IFMBE, 20-25/11/2005, Praha, Czech Republic.
- P. Caselli, E. Piferi, D. Bibbo, S. Conforto “Elaboration of a minimum number of accelerometric signals for activity monitoring. 6th SIAMOC congress” proceedings of SIAMOC 2005, 26-29/10/2005, Tirrenia (PI), Italy.
- M. Goffredo, M. Carli, S. Conforto, D. Bibbo, A. Neri, T. D’Alessio, “Evaluation of Skin and Muscular Deformations in a non-rigid motion analysis”, proceedings of IS&T/SPIE’s International Symposium on Medical Imaging, 12-17/02/2005, San Diego, California, USA.
- D. Bibbo, M. Goffredo, S. Conforto, M. Schmid, T. D'Alessio, “Experimental setup for evaluating the accuracy of markerless human motion estimation techniques”, proceedings of IMEKO-IEEE-SICE, 14-16/06/2004, Genova, Italy.

Patents

- Inventor in the Italian Patent n.TO2007A000955 relased on 23/12/2010 and with commercial priority from 28/12/2007 titled “Sitema di valutazione dell’efficienza di pedalata di un ciclista”.
- Inventor in the Italian Patent n.RM2010A000588relased on13/11/2013and with commercial priority from05/11/2010titled ““Corpo per pedale strumentato e procedimento di produzione dello stesso”.
- Inventor in the European Patent Application n.11797113.5 with commercial priority from 05/11/2010 titled “Body for instrumented pedal and production process thereof”.

Publications on National Congress Procedings

- C. D'Anna, M. Schmid, D. Bibbo, T. D'Alessio, S. Conforto. Effetti del biofeedback visivo sulle strategie di controllo posturale. XI Convegno Nazionale Bioingegneria, Messina: July 5, 2013
- C. De Marchis, A.M. Castronovo, D. Bibbo, S. Conforto. Stability of muscle synergies across different pedalling strategies in untrained subjects. Proceedings of the Third Conference of the Italian National Bioengineering Group (GNB2012), Rome, Italy : June 27-29, 2012
- A.M. Castronovo, C. De Marchis, D. Bibbo, T. D'Alessio. Evaluation of Neuromuscular Efficiency at task failure during submaximal cycling. Proceedings of the Third Conference of the Italian National Bioengineering Group (GNB2012), Rome, Italy: June 27-29, 2012
- D. Bibbo, I. Bernabucci, M. Schmid, T. D'Alessio, S. Conforto. A novel real time system to evaluate pedaling power and efficiency during cycling. Secondo Congresso Nazionale di Bioingegneria, Turin, Italy: July, 8-10, 2010
- D. Bibbo, M. Scialotti, G. Poldi, G. Malerba, T. D'Alessio. An automated system to acquire data and to monitor performance of electromedical equipment. Secondo Congresso Nazionale di Bioingegneria, Turin, Italy: July, 8-10, 2010

Teaching Activities

Academic contract for teaching "Principles of Bioengineering (2nd module) " , SSD ING-INF/06 , Department of Engineering, University of Roma Tre University , for the academic years 2012-2013 and 2013-2014.

Academic contract for teaching"Laboratory of Biomedical Engineering" SSD ING-INF/06 , Faculty of Engineering , University of Roma Tre , for the academics years from 2008 to 2011.

Teaching assistant for "Principles of Bioengineering ," SSD ING-INF/06 , Faculty of Engineering, University of Roma Tre University , for the academic year 2011-2012.

Teaching assistant for " Data and biomedical signals processing" SSD ING-INF/06 , Faculty of Engineering, University of Roma Tre University , for the academic years from 2004 to 2009.

Teaching assistant for the teaching of "Laboratory of Biomedical Engineering " SSD ING-INF/06 , Faculty of Engineering, University of Roma Tre University , for the academic years from 2004-2005 to 2007-2008.

Teaching assistant for" Biomedical Instrumentation and laboratory," SSD ING-INF/06 , Faculty of Engineering, University of Roma Tre University , for the academic year from 2005 to 2008.

Co-supervisor of more than 40 experimental thesis in the field of Biomedical Engineering at the Faculty of Engineering of the University Roma Tre.

Projects

Design and realization of a instrumented cycling roller for the real time power and torque evaluation, in collaboration with Elite s.r.l., Fontaniva (PD) Italy (ongoing project).

Design and realization of a instrumented pedal based system for the real time cycling efficiency evaluation (National patents n.TO2007A000955and n.RM2010A000588,European Patent Application n.11797113.5), in collaboration with Elite s.r.l., Fontaniva (PD) Italy.

Design and development of a commercial system for the Biomedical devices performances evaluation in collaboration with Ginevri s.r.l., Albano Laziale (RM), Italy.

Design and development of a wireless and wearable system for the human body inertial data measurement.

Mechanical and electronical design and development of a 3 components posturoghraphic force plate.

Design and development of a non-invasive system for the evaluation of the cardiac output, based on force sensors.