

Personal information

First name(s) / Surname(s) **Carmen D'Anna**
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E-mail carmen.danna@uniroma3.it
Nationality Italian
Date of birth March 30th, 1984

Research Interests **Motor control, Posturography, Biofeedback, Signal Processing, Biomechanics, Neurorehabilitation**

Work experience

Dates	1 February 2017 – present
Occupation or position held	Research Fellow
Field	“Study and development of biofeedback systems for the recovery or rehabilitation of motor control schemes”
Name and address of employer	University of Roma TRE Biolab ³ – Laboratory of Biomedical Engineering Department of Engineering University Roma TRE Via V. Volterra 62/B, I-00146, Rome, Italy
Dates	1 February 2016 – 31 January 2017
Occupation or position held	Research Fellow
Field	“Study and development of biofeedback systems for the recovery or rehabilitation of motor control schemes”.

Name and address of employer	University of Roma TRE Biolab ³ – Laboratory of Biomedical Engineering Department of Engineering University Roma TRE Via V. Volterra 62/B, I-00146, Rome, Italy
Dates	24 October 2015 - 23 October 2016
Occupation or position held	Teaching position - Postgraduate course for special needs teachers
Field	Laboratory – SodiLinux
Name and address of employer	University of Roma TRE
Dates	Academic year 2014-2015
Occupation or position held	Teaching position - Postgraduate course for special needs teachers
Field	Laboratory – SodiLinux
Name and address of employer	UNIVERSITA' EUROPEA DI ROMA Via degli Aldobrandeschi 190 - 00163 Roma 06/66543912

Dates	Academic year 2017-2018 Academic year 2015-2016
Occupation or position held	Supplementary teaching contract – Biomedical Data Processing
Field	Bioengineering
Name and address of employer	University of Roma TRE Department of Engineering Via V. Volterra 62/B, I-00146, Rome, Italy
Dates	Academic year 2013-2014 Academic year 2014- 2015
Occupation or position held	Supplementary teaching contract – Fundamentals of Bioengineering (1 module)
Field	Bioengineering
Name and address of employer	University of Roma TRE Department of Engineering Via V. Volterra 62/B, I-00146, Rome, Italy
Dates	June 2012 – October 2012
Occupation or position held	Trainee
Field	Processing of Brain SPECT Imaging
Name and address of employer	National Research Council (CNR) Institute of Neurological Sciences Via P.Gaifami 18,95126 , Catania, Italy

Education and training

Dates	1 June 2016
Title of qualification awarded	PhD in Applied Electronics
Name and type of organisation providing education and training	University of Roma TRE
Dates	26 October 2011
Title of qualification awarded	Master degree in . Bioengineering
Name and type of organisation providing education and training	University of Roma TRE
Level in national or international classification	Master Degree (M.Sc. EE) <i>Summa cum laude</i>
Dates	April 2009

Title of qualification awarded Bachelor degree in Electronic Engineering
 Name and type of organisation providing education and training University of Catania
 Level in national or international classification Bachelor Degree (B.Sc. EE)
 105/110

Mother tongue(s) **Italian**

Other language(s) **English (EN)**

Self-assessment <i>European level (*)</i>	Understanding		Speaking		Writing
	Listening	Reading	Spoken interaction	Spoken production	
Language	EN	B2	C1	B2	B2

(*) [Common European Framework of Reference for Languages](#)

List of papers and of contributions to international and national conferences

1. **[IC1] 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
2. **[IC2] C. D'Anna**, D. Bibbo, C. De Marchis, M. Goffredo, M. Schmid, S. Conforto. Comparing different visual biofeedbacks in static posturography. IEEE-EMBS International Conference on Biomedical and Health Informatics (BHI), Valencia, Spain: June 1-4, 2014
3. **[IC3] C. D'Anna**, F.Patanè, M.Schmid, P.Cappa, E. Castelli, S. Gazzellini, S. Conforto, M. Petrarca. The time-to –boundary function to assess upright stance in static and dynamic condition. 1ST Clinical Movement analysis world conference, Rome, Italy 20 Sept-4 Oct., 2014
4. **[IC4] C. D'Anna**, S. Gazzellini, M. Petrarca, G. Vasco, E. Castelli, M. Schmid, S. Conforto. Time to boundary function to assess upright stance in blind children. 37TH ANNUAL INTERNATIONAL CONFERENCE OF THE IEEE Engineering in Medicine and Biology Society, Milan, Italy 25-29 Aug., 2015.
5. **[IC5] C. D'Anna**, M. Schmid, A. Scorza, M. Goffredo, S. A. Sciuto, S. Conforto. Can a Visual Biofeedback system based on predictive information improve postural performance? 37TH ANNUAL INTERNATIONAL CONFERENCE OF THE IEEE Engineering in Medicine and Biology Society, Milan, Italy 25-29 Aug., 2015.
6. **[IC6] S. Gazzellini, C. D'Anna**, S. Conforto, G. Vasco, E. Castelli, M. Petrarca. Do children with congenital blindness have balance deficits? Evidence from a posturography study with traditional and new parameters. ESMAC 2015, Gait and Posture 425 (2015) S1-S101.
7. **[IC7] Goffredo, M., Piras, P., Varano, V., Gabriele, S., D'Anna, C., & Conforto, S.** (2016). Shape Analysis of Bicipital Contraction by Means of RGB-D Sensor, Parallel Transport and Trajectory Analysis. In XIV Mediterranean Conference on Medical and Biological Engineering and Computing 2016 (pp. 628-633). Springer International Publishing.
8. **[IC8] D'Anna, C.,** Bibbo, D., Bertollo, M., di Fronso, S., Comani, S., De Blasiis, M. R., ... & Conforto, S. (2016). State of Alertness During Simulated Driving Tasks. In XIV Mediterranean Conference on Medical and Biological Engineering and Computing 2016 (pp. 907-912). Springer International Publishing.
9. **[IC9] D'Anna, C.,** et al. "A preliminary study on the validation of automatic measurement method for functional reach assessment by stereophotogrammetry." Instrumentation and Measurement Technology Conference (I2MTC), 2017 IEEE International. IEEE, 2017.

10. **[IC10]** Caramia, C., Bernabucci, I., **D'Anna, C.**, De Marchis, C., Scorza, A., & Schmid, M. (2018, June). Wavelet-based detection of gait events from inertial sensors: analysis of sensitivity to scale choice. In 2018 IEEE International Symposium on Medical Measurements and Applications (MeMeA) (pp. 1-5). IEEE.
11. **[IC11]** Orsini, F., Scorza, A., **D'Anna, C.**, Pompeo, N., Silva, E., Sciuto, S. A., & Leccese, F. (2018, June). A Method For Force Platforms Dynamic Performances Characterization In Clinical Applications. In 2018 IEEE International Symposium on Medical Measurements and Applications (MeMeA) (pp. 1-6). IEEE.
12. **[IC12]** Varrecchia, T., **D'Anna, C.**, Scorza, A., Sciuto, S. A., & Conforto, S. (2018, June). Muscle activity detection in pathological, weak and noisy myoelectric signals. In 2018 IEEE International Symposium on Medical Measurements and Applications (MeMeA) (pp. 1-5). IEEE.
13. **[IC13]** **D'Anna, C.**, Varrecchia, T., Bibbo, D., Orsini, F., Schmid, M., & Conforto, S. (2018, June). Effect of different smartphone uses on posture while seating and standing. In 2018 IEEE International Symposium on Medical Measurements and Applications (MeMeA) (pp. 1-5). IEEE.
14. **[IC14]** Caramia, C., Bernabucci, I., **D'Anna, C.**, De Marchis, C., & Schmid, M. (2019). Gait Ratios and Variability Indices to Quantify the Effect of Using Smartphones in Dual-Task Walking. In World Congress on Medical Physics and Biomedical Engineering 2018 (pp. 573-578). Springer, Singapore.
15. **[NC1]** **C. D'Anna**, M. Schmid, D. Bibbo, T. D'Alessio, S. Conforto. Effetti del biofeedback vivo sulle strategie di controllo posturale. XI Convegno Nazionale Bioingegneria, Messina, Luglio 5 ,2013
16. **[NC2]** **C. D'Anna**, D. Bibbo, T. D'Alessio, M. Goffredo, M. Schmid, S. Conforto. A Predictive Visual Biofeedback to improve balance in upright stance trials. GNB, Pavia, Giugno 2014
17. **[NC3]** **C. D'Anna**, D. Bibbo, M. Goffredo, M. Schmid, S. Conforto. Describing the effect of different visual biofeedback presentations on postural strategies in quiet stance: a case study. GNB, Napoli, 2016
18. **[NC4]** T. Varrecchia, **C. D'Anna**, M. Schmid, S. Conforto. Muscle activity detection in weak and noisy myoelectric signals. GNB, Milan, 2018
19. **[NC5]** C. Caramia, C. De Marchis, **C. D'Anna**, I. Bernabucci, M. Schmid. Gait ratio as estimated by a single inertial sensor: a feasibility analysis. GNB, Milan, 2018
20. **[NC6]** M.Rinaldi, **C. D'Anna**, M. Schmid, S. Conforto. The effect of pre-processing settings on muscle co-activation assessment with synthetic and experimental signals. GNB, Milan, 2018

21. **[JP1] D'Anna, C.**, Schmid, M., Bibbo, D., Bertollo, M., Comani, Conforto, S. (2015). The Effect of Continuous and Discretized Presentations of Concurrent Augmented Visual Biofeedback on Postural Control in Quiet Stance. PloS one, 10(7), e0132711.
22. **[JP2] A Scorza, S Conforto, Sciuto, C D'Anna.** A Comparative Study on the Influence of Probe Placement on Quality Assurance Measurements in B-mode Ultrasound by Means of Ultrasound Phantoms. The Open Biomedical Engineering Journal 07/2015; 9:164-178. DOI:10.2174/1874120701509010164
23. **[JP3] D'Anna, C.**, Schmid, M., Scorza, A., Sciuto, S. A., Lopez, L., & Conforto, S. (2017). Time-to-Boundary Function to Study the Development of Upright Stance Control in Children. The open biomedical engineering journal, 11, 49.
24. **[JP4]C Caramia, I Bernabucci, C D'Anna, C De Marchis, M Schmid.** (2017) Gait parameters are differently affected by concurrent smartphone-based activities with scaled levels of cognitive effort. PloS one 12 (10), e0185825.
25. **[JP5] A Scorza, C Massaroni, F Orsini, C D'Anna, S Conforto, S Silvestri, et al.** (2018) A Review on Methods and Devices for Force Platforms Calibration in Medical Applications. Journal of Engineering Science & Technology Review 11 (1).
26. **[JP6] Rinaldi, M., D'Anna, C., Schmid, M., & Conforto, S.** (2018). Assessing the influence of SNR and pre-processing filter bandwidth on the extraction of different muscle co-activation indexes from surface EMG data. Journal of Electromyography and Kinesiology, 43, 184-192.

Published Books

[PB1] C.D'Anna, D. Reforgiato. Topology management for Multicast Video Streaming. Lambert Academic Publishing ,2010.

Roma, 28/01/2019

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