PERSONAL INFORMATION Valerio Francesco Annese

Glasgow, Scotland, UK.

0039 080 3340154 (Italy) 0044 07428499470 (UK)

valerio-annese@hotmail.it; v.annese.1@research.gla.ac.uk

https://www.researchgate.net/profile/Valerio_Annese

https://it.linkedin.com/in/valerio-annese-964237121

Sex Male | Date of birth 19/06/1991 (25y) | Nationality Italian

WORK EXPERIENCE

From December 2016 onward

PhD Student at the University of Glasgow
School of Engineering, University of Glasgow, Glasgow, Scotland, UK.
Supervisor: Prof. David Cumming
Founder: EPSRC, UK.
Project: "The Multicorder", multiple enzymes assay for metabolite analysis.

Main research fields: IC Design, Chip post-processing, Nano-electronics, device fabrication, bio-electronics, surface functionalization, flexible electronics, drop on demand (DoD) printing.

From April 2014 to December 2016 (2years and 8 months)

Research Assistant at Technical University of Bari, Italy

DEIS LAB (http://dee.poliba.it/DEIS/index.html), Dept. of Electrical and Information Engineering Politecnico di Bari, Via Orabona 4, 70125 Bari – Italy.

- Research Assistant (8 months): PERSON – Regional Cluster. Activity: "A neuro-cognitive monitoring mobile-health system based on P300 characterization. Design, Development and test in vivo."
- Scholarship of Research (18 months): RES NOVAE (PON R&C 2007 -2013 – "SUPPORTING INNOVATION" - operational objective: "integrated actions for sustainable development and for information society development", promoted by the Italian Ministry of Economic. Development, research, experiments and models management systems regarding advanced energy flows based on the integration of technologies in the field of Information Technology.
- Scholarship of Research (6 months): CESAR RIDITT (PON R&C 2007 -2013, granted by the Italian Ministry of Economic Development). Research work about Wireless Sensor Networks for safety and certification in a supply-chain of perishables goods.
- INNOVAALAB, regional project. Research work about the combination of EEG and EMG signals for biofeedback (fall prevention and gait analysis).

Main Collaborations: Dept. of Neuroscience, University of Bari (IT); SISINFLAB, Politecnico di Bari (IT); Politecnico di Torino (IT); University of Glasgow (UK); University of California at Berkely (US).

Main Fields: Electrical and Telecommunication Engineering; Energy Harvesting; Bio-Engineering; WSN.

From August 2013 to December 2013

Research activity at the "University of Glasgow" (Thesis Student)
"University of Glasgow", Glasgow, Scotland (UK). Erasmus Scholarship.
Research work about the design and the implementation of a biodegradable pressure sensor.

Main Fields: Electronics, health care, wireless communication.

From June to Sept. 2011, 2010, 2009

Collaborator at the society "Svimservice " - Seasonal Assistant
"Svimservice" – Via del Faro, 70132 Bari – Italy
- Support for loading and storage of health information

Main Fields: Health-Care, Data Management, Database.

PUBBLICATIONS (30)

Complete list of publications (30)

Available: http://www.researchgate.net/profile/Valerio_Annese/publications
Conference Papers (23)
Journal Articles (4)
Book Chapter (1)
In print (2)
See the attached list of publications.

EDUCATION

From September 2014 to October 2016	**Master's degree (II level degree) in "Electronic Systems Engineering"** "Politecnico di Bari", I Facoltà di ingegneria, Bari, Italy. Final Result: 110/110 Magna cum Laude
From October 2010 to March 2014	**Bachelor's degree (I level degree) in "Electronics and Telecommunication Engineering"** "Politecnico di Bari", I Facoltà di ingegneria, Bari, Italy. Final Result: 105/110
From September 2005 to June 2010	**Scientific High School Diploma** Liceo scientifico "Albert Einstein", Molfetta (Ba), Italy Final Result: 100/100

PERSONAL SKILLS

Mother tongue

Italian

Other language(s)

English
Indipendent User (Level: B2, certified).

Job-Related Competence

Main fields of expertise: Electronics and Communication Engineering, EEG Biofeedback, Analog Electronics, EEG Analysis, System on Chip Design, Digital Signal Processing, Signal Processing, Signal Processing for Communication, FFT, Time-Frequency Analysis, Power Spectrum Density, Low Power, Chip Design, FPGA, Neural Circuits, EMG Biofeedback, Surface EMG, Analog Design, Digital.

Job-Related Computer skills

Expert user in Matlab, Simulink, Cadence, Orcad, Virtuoso, ADS.
Good ability in Octave, LabView, Visual Studio, Allegro, Quartus, Comsol.
Expert user with all the Microsoft Office programs.
Good ability in C, C++ and HTML programming.

Communication skills

Good communication skills gained through a multitude of international conferences as a speaker (certificates are available on request). Main attended conferences:

1. CESCE, 21-22 June 2014, London. ORAL presentation.
2. ICST 2014, 2-4 September Liverpool (UK). ORAL presentation.
3. IEEE - ICECS 2014, 7-10 December 2014, Marseille (FR). ORAL presentation.
4. IEEE - DATE 2015 & Univ. Booth, 9 – 12 March 2015, Grenoble (FR). POSTER presentation.
5. edaWorkshop 2015, May 19-21, 2105, Dresden (Germany). POSTER presentation.
6. IEEE – EEIC Rome, June 10-13, 2015. ORAL presentation.
7. IEEE – IWASI 2015, June 18-19 2015, Gallipoli (IT). ORAL Presentation, Local committee Member, Session Chair, **Best presentation award**.
8. IEEE – ISSPIT 2015, December 7-10 2015, Abu Dhabi, UAE. ORAL Presentation.
9. IEEE – THETYS 2015, December 14-15 2015, Bari, Italy. ORAL Presentation.
10. IEEE - DATE 2016 & Univ. Booth, 14-18 March 2016, Dresden (Germany). ORAL presentation.
11. IEEE - ISCAS 2016, 22-25 May 2016, Montreal (CA). ORAL presentation.
12. IWES 2016, Pisa, Italy 19-20 September 2016. ORAL Presentation.
13. SEMAPRO 2016, Venezia, Italy, October 9 - 13, 2016. ORAL Presentation. **Best Paper Award**.

Ability to speak in public developed also in response to different theatrical experience (since 2000) with the theatrical "Freedom" under the direction of prof. Antonio Ragno. Most significant representations: "St. Francis" in 2001, "Don Lorenzo Milani" in 2003, "Ettore Majorana" in 2008, "Pereira" in 2009, "La meglio gioventù" in 2010, "Happy Family" in 2012.

Organizational skills

Team work gained through team sports (soccer championships 2001 -2005 , "Molfetta calcio ASD"; volleyball championships: 2006 -2009, " Indeco Molfetta") scout experience (AGESCI Molfetta, 2001-2002) and team work (research activity performed in team).
Open-minded, flexibility and interculturalism: fascinated by the cultural differences. I had three experiences of study abroad:
Summer 2007 - Canterbury, England. Duration: 3 weeks. English course at the University Rite. Accommodation on the university campus.
Summer 2008 - Limerick, Ireland. Duration: 3 weeks. English course at the University of Limerick. Accommodation on the university campus.
From August 2013 to December 2013 - Glasgow, Scotland. Duration: 5 months. International exchange student at the "University of Glasgow" (Erasmus). Actively involved in research activity in the University Labs. Conducted and prepared the Final project" (Thesis). Private accommodation.

Other skills

Expert in playing the piano: 1997-1999 at the musical institute "Dvorjak" in Molfetta, 1999-2010 teachers Dr. Gaetano Samarelli and Dr.Cosmo Marzo.

ADDITIONAL INFORMATION

Driving Licence	A1 and B
Publications	See Publications List Section attached to this CV
Presentations	See the Communication Skills Section
Projects	MULTICORDER, PERSON, RES NOVAE, RIDITT, INNOVAALAB (see the Work Experiences Section)
Conferences	See the Communication Skills Section
Honours and Awards	Best Oral Presentation Award at IEEE-IWASI 2015, Gallipoli – Italy, 18 and 19 June 2015. Best Paper Award at SEMAPRO 2016, Venice – Italy, 9-13 October 2016.
Memberships	IEEE Member (Student); IEEE CASS Member (student); IEEE Young Professional Member
References	On request
Annexes	List of Publications;

The handling of personal data is authorized (art. 13 del D. Lgs. 196/2003 - Italy)

Last Update: 06/02/2017

List Of PUBLICATIONS (30)

Book Chapters (1)

1. Daniela De Venuto, Valerio Francesco Annese, Marina de Tommaso, Eleonora Vecchio, Alberto Sangiovanni Vincentelli: Combining EEG and EMG signals in a wireless system for preventing fall in neurodegenerative diseases. Ambient Assisted Living: Italian Forum 2014, Edited by Bruno Ando, Pietro Siciliano, Vincenzo Marletta, Andrea Monteriù, 06/2015: chapter Elderly People Monitoring: pages 317 - 328; Springer., ISBN: 978-3-319-18374-9

Journal Publications (4)

2. Daniela De Venuto, Valerio Annese, Michele Ruta, Eugenio Di Sciascio, Alberto Sangiovanni Vincentelli: Designing a Cyber-Physical System for Fall Prevention by Cortico-muscular Coupling Detection. IEEE Design and Test; DOI: 10.1109/MDAT.2015.2480707. ISSN: 2168-2356. 01/2015
3. Valerio Francesco Annese, Daniela De Venuto, Christopher Martin, David R.S. Cumming: Biodegradable Barometric Endoradiosonde for Biotelemetry Applications. International journal of engineering science and Innovation Technology 2319-5967 (IJESIT). ISSN: 2319-5967. pp. 298-306. 2014
4. Valerio Francesco Annese, Giuseppe Elia Biccario, Silvia Cipriani, Daniela De Venuto: Organoleptic Properties Remote Sensing and Lifetime Prediction along the Perishables Goods Supply- Chain. International Journal on Smart Sensing and Intelligent Systems; 2014 Eighth International Conference on Sensing Technology: 130-135. ISSN: 1178-5608. 09/2014
5. De Venuto, Daniela, Valerio Francesco Annese, and Giovanni Mezzina. "Remote Neuro-Cognitive Impairment Sensing based on P300 Spatio-Temporal Monitoring." IEEE Sensors Journal 16.23. Pages: 8348 - 8356, DOI: 10.1109/JSEN.2016.2606553. Online ISSN: 1558-1748. 2016.

Conference Proceedings (23)

6. V.F. Annese, G. Mezzina, D. De Venuto. “Cyber-Physical System for Gait Analysis and Fall Risk Evaluation by Embedded Cortico-muscular Coupling Computing”. Proceedings of SEMAPRO 2016, Venezia, Italy, October 9 - 13, 2016. ISBN: 978-1-61208-507-4. 2016. **Best Paper Award @ SEMPARO 2016.**
7. D. De Venuto, V. F. Annese, G. Mezzina, M. Ruta, E. Di Sciascio. “Brain-Computer Interface using P300: A Gaming Approach for Neurocognitive Impairment Diagnosis”. Proceedings – 2016 IEEE HLDVT, Santa Cruza, USA. ISBN: 978-1-5090-4270-8. 2016.
8. V.F. Annese, G. Mezzina, D. De Venuto. “Towards Mobile Health Care: Neurocognitive Impairment Monitoring by BCI-based Game”. Proceedings – IEEE SENSORS 2016, Orlando, USA. ISBN: 978-1-4799-8287-5. 2016
9. Daniela De Venuto, Valerio Annese, Alberto Sangiovanni Vincentelli. The Ultimate IoT Application: a Cyber-Physical System for Ambient Assisted Living. IEEE - ISCAS 2016, Montreal (CA). ISBN: 978-1-4799-5340-0, pp. 2042-2045. 05/2016
10. Valerio Francesco Annese, Christopher Martin, David Cumming, Daniela De Venuto. Wireless Capsule Technology: Remotely Powered Improved High-Sensitive Barometric Endoradiosonde. IEEE - ISCAS 2016, Montreal (CA). ISBN: 978-1-4799-5340-0, pp. 1370-1373. 05/2016.
11. Valerio F. Annese, Marco Crepaldi, Danilo Demarchi, Daniela De Venuto. A Digital Processor Architecture for Combined EEG/EMG Falling Risk Prediction. IEEE - DATE 2016, Dresden. ISBN: 15969531, pp. 714 – 719. 03/2016
12. Valerio Francesco Annese, Daniela De Venuto: Design Improvements of ERS MEMS Vibrational Electrostatic Energy Harvester. TETHYS 2015 - Toward Emerging Technology for Harbour sYstems and Services, Bari; 12/2015
13. Valerio Francesco Annese, Daniela De Venuto: The Truth Machine of Involuntary Movement: FPGA Based Cortico-Muscular Analysis for Fall Prevention. 2015 IEEE International Symposium on Signal Processing and Information Technology (ISSPIT), Abu Dhabi; ISBN: 978-1-5090-0480. 12/2015
14. Daniela De Venuto, Valerio Francesco Annese, Michele Ruta, Eugenio di Sciascio: Wireless Control of the Cortico-Muscolar Coupling in Human Walking to Prevent Falls. 1st SCORE@POLIBA, Bari, Italy; ISBN: 978-88-492-2964-6. 12/2015
15. Valerio Francesco Annese, Daniela De Venuto: Fall-Risk Assessment by Combined Movement Related Potentials and Co-contraction Index Monitoring. IEEE BIOCAS 2015 - Biomedical Circuits and Systems Conference, Atlanta, Georgia, USA; ISBN: 978-1-4799-7234-0. 10/2015
16. Valerio Francesco Annese, Daniela De Venuto: FPGA based architecture for Fall-Risk Assessment during Gait Monitoring by synchronous EEG/EMG. 2015 6th IEEE International Workshop on advances in Sensors and Interfaces (IWASI), Gallipoli, Italy; ISBN: 978-1-4799-8981-2. 06/2015. **Best Presentation Award @ IEEE – IWASI 2015.**
17. Valerio Francesco Annese, Eleonora Vecchio, K. Ricci, A. Montemurno, Marina De Tommaso, Daniela De Venuto: Combined EEG/EMG Evaluation during a Novel Dual Task Paradigm for Gait Analysis. IEEE IWASI 2015, Gallipoli, Italy; ISBN: 978-1-4799-8981-2. 06/2015
18. Valerio Francesco Annese, Daniela De Venuto: On-line Shelf-Life Prediction in Perishable Goods Chain through the Integration of WSN Technology with a 1st Order Kinetic Model“. IEEE EEIC, Roma, Italy; ISBN: 978-1-4799-7992-9. 06/2015
19. Valerio Francesco Annese, Daniela De Venuto: Cyber-Physical System for Movement Related Potentials Early Detection by Synchronized EEG and EMG Signals. EdaWorkshop 2015, Dresden, GR; ISBN: 9783863869144. 05/2015
20. Valerio Francesco Annese, Daniela De Venuto: FPGA-Based System for Real-Time Pattern Detection of Voluntary Movement by Synchronized EEG and EMG. FORITAAL 2015, Lecco, Italy; 05/2015
21. Valerio Francesco Annese, Daniela De Venuto: Gait analysis for fall prediction using EMG triggered movement related potentials. IEEE International Conference on Design & Technology of Integrated Systems in Nanoscale Era (DTIS), 2015, Napoli, Italy; 04/2015
22. Valerio Francesco Annese, Daniela De Venuto, Christopher Martin, David R.S. Cumming: Biodegradable Pressure Sensor for Health-Care. IEEE - 21st IEEE International Conference on Electronics, Circuits and Systems (ICECS), 2014, Marseille, FR; ISBN: 978-1-4799-4242-8/14. 12/2014
23. Valerio Francesco Annese: Findings from the RES NOVAE Project: New Scenarios, Devices and Applications for the Smart District. 1st SCORE@POLIBA, Bari, Italy; ISBN: 978-88-492-2964-6. 12/2014
24. Valerio Francesco Annese, Giuseppe Loseto, Michele Ruta, Eugenio di Sciascio, Daniela De Venuto: Wireless Sensor Network and On-Line Shelf-Life prediction in Perishables Goods Supply Chain through First-Order Kinetic Mode. 1st Score@Poliba, Bari, Italy; ISBN: 978-88-492-2964-6. 12/2014.
25. Giuseppe Elia Biccario, Valerio Francesco Annese, Daniela De Venuto: WSN-based near Real-time Environmental Monitoring for Shelf Life Prediction through Data Processing to Improve Food Safety and Certification. 11th International Conference on Informatics in Control, Automation and Robotics (ICINCO-2014), Vienna, AU; ISBN: 978-989-758-039-0. 09/2014
26. Giuseppe Elia Biccario, Valerio Francesco Annese, Daniela De Venuto: Wireless Remote Environmental Monitoring and Control of Perishable Goods in Maritime Transportation. TETHYS 2014, Bari, Italy; 07/2014.
27. Valerio Francesco Annese, Giuseppe Elia Biccario, Daniela De Venuto: WSN for Real Time Sea Water Quality Monitoring. TETHYS 2014, Bari, Italy; 07/2014.
28. Valerio Francesco Annese, Silvia Cipriani, Giuseppe Biccario, Davide Di Marzio, Daniela De Venuto: Wireless Shelf life monitoring and Real Time prediction in a Supply-Chain of perishables goods. CESCE 2014, London, UK; ISSN: 1743-3509. 06/2014

In Press (2)

29. V.F. Annese, G. Mezzina, D. De Venuto. “An Embedded System Remotely Driving Mechanical Devices by P300 Brain Activity”. Accepted at DATE 2017, 27-31 March 2017, Lausanne, Switzerland.
30. V.F. Annese, G. Mezzina, D. De Venuto. “Towards P300-based Mind-Control: a Non-Invasive Quickly Trained BCI for Remote Car Driving”. Accepted at S-CUBE, 1-2 December 2016, Nice, France.

Last Update: 06/02/2017