Curriculum Vitae
of
Gianluca Susi
Electronics Engineer, Ph.D

(updated 2018)

Personal Information	
Name SURNAME	Gianluca SUSI
Mail	gianluca.susi82@gmail.com
Nationality	Italian
Gender	Male
Researcher unique identifier	B-4021-2015
Orcid id	0000-0002-8477-8156
Personal page	[ELTLAB](#)

Professional sectors	Electronics Engineering - Biomedical Engineering - Audio Engineering

Awards and grants

Awards and recognition

2018
"Reconocimiento tecnologia sanitaria 2018" to the Laboratory of Cognitive and Computational Neuroscience" (Centro de Tecnologia Biomedica), received from *Fundacion tecnologia y Salud.* Madrid, 20/09/2018.

2017-2018
"Seal of excellence" to Gianluca Susi and Complutense University of Madrid*,* received from the *European Commission*, for the proposal "CHASING-AD"(n.793355), submitted under the Horizon 2020's *Marie Skłodowska-Curie Actions* call (H2020-MSCA-IF-2017).

2016-2017
"Seal of excellence" to Gianluca Susi and Complutense University of Madrid*,* received from the *European Commission*, for the proposal "CRISP"(n.747912), submitted under the Horizon 2020's *Marie Skłodowska-Curie Actions* call (H2020-MSCA-IF-2016).

2013
"Best Poster" award received at the 29th Annual Meeting of Electrical Engineering Researchers (Padova University, IT). Padova, 06/2013 (Recipient: G.Susi).

2012
"Best Paper Category" award received at the International Conference on computer science and communication devices *"ACEEE, ACE 2012"* (Amsterdam, NL). Amsterdam, 06/2012 (Recipient: G.Susi).

Grants

2017
Recipient of a travel grant funded by the *Human Brain Project*, for the participation to the event YRE2017. 12-13/09/2017 Campus Biotech, Geneva (Switzerland).

2016
Recipient of the grant "*Gathering and processing of brain signals (Almacenamiento y procesamiento de señales cerebrales)*" at the UPM-UCM *Laboratory of Cognitive and Computational Neuroscience - Centre for Biomedical Technology* of *Madrid, Technical University of Madrid.* Funding institution: *Spanish Ministry of Economy and Competitiveness*.

2015-2016
Recipient of the grant "*Modeling of spontaneous neuroelectric activity*" (6-months) at the *University of Rome "Tor Vergata*" - *Dept. of Electronic Engineering.* Funding institution: *University of Rome "Tor Vergata*" - *Dept. of Electronic Engineering*.

2015
Recipient of the grant " *Pulsed neural networks (Reti Neurali Impulsate)*" (6-months) at the *University of Rome "Tor Vergata*" - *Dept. of Electronic Engineering.* Funding institution: *University of Rome "Tor Vergata*" - *Dept. of Electronic Engineering*.

2014	Recipient of the grant "*Spiking neural network characterization*" (6-months) at the *University of Rome "Tor Vergata"* - *Dept. of Electronic Engineering.* Funding institution: *University of Rome "Tor Vergata"* - *Dept. of Electronic Engineering.*
2013-2014	Recipient of the grant "*Asynchronous spiking neural networks*" (2 x 6-months) at the *University of Rome "Tor Vergata"* - *Dept. of Electronic Engineering.* Funding institution: *University of Rome "Tor Vergata"* - *Dept. of Electronic Engineering.*
2009-2012	Recipient of a 3-year grant for Ph.D. in "*Engineering of sensor and learning systems*" at the University of Rome "Tor Vergata". Funding institution: *Italian Ministry of Education, Universities and Research.*

Professional experience	*Teaching experience:*
2013-2018	*Adjunct professor* of *Electrical Circuits* (*professore a contratto* di *Elettrotecnica,* titolare) at the *University of Rome "Tor Vergata"* - *Dept. of Civil Engineering and Computer Science.* Afferent university sections: Ingegneria Civile e Ambientale 6CFU (2013-2018), Ingegneria Informatica 6CFU (2013-2018), Ingegneria Medica 12CFU (2015-2018), Ingegneria Informatica "online" 6CFU (from 2014).
2011-2015	*Teaching assistant* of the course *Electrical Circuits (assistente di Elettrotecnica)* at the *University of Rome "Tor Vergata"* - *Depts: Civil Engineering and Computer Science, Mechanical Engineering, Management Engineering.* Afferent university sections: Ingegneria Medica (2011-2015), Ingegneria Civile e Ambientale (2011-2013), Ingegneria Meccanica (2011-2013).
2010-2017	*Lecturer (docente*) of the courses *Audio-data coding and compression systems (from 2010), Basic mathematics for audio (from 2010), Signal processing theory (from 2013),* for the *MIS* (*Master in Ingegneria del Suono e Spettacolo*) - *Master in Audio Engineering* at the *University of Rome, "Tor Vergata"* - *Dept. of Electronic Engineering.*
2012-2017	*Lecturer (docente*) of the courses *Audio-data coding and compression systems, Basic mathematics for audio, Signal processing theory* for the *training school in Audio and Entertainment Engineering Program* at the *University of Rome, "Tor Vergata"* - *Dept. of Electronic Engineering.*
2010-2015	*Lecturer* (*docente*) of the course *Audio/video editing* at *UPTER* (*Popular University of Rome*).
	Academic activities:
2010-2018	*Coordinator* (2010-2013), *Scientific committee member* (2010-2018) and *Coordinating member* (2013-2018) of the *MIS* (*Master in Ingegneria del Suono e dello Spettacolo) - Audio Engineering Program* at the *University of Rome, "Tor Vergata"* - *Dept. of Electronic Engineering.*
2013-2018	*Didactic organizer* (2013-2018) of the "*Training school* in *Audio engineering techniques*" at the *University of Rome, "Tor Vergata"* - *Dept. of Electronic Engineering.*
	Other:
2006-2009	Informatics and organizational consultant for the *Mathesis (Italian Society of Physical and Mathematical sciences).*

Patents, publications, invited presentations	Patents
	Patent application: "*Traduttore aptico di scena tridimensionale dinamica, real-time portatile, per navigazione pedestre senza l'uso della vista*" (Haptic portable system for pedestrial blind navigation, based on depth camera) - ID: RM2012U000199 - RM2014A000669. Author: Gianluca Susi. Status: transformed from modello di utilità to patent for industrial invention. Pending.
	Publications (please refer to my "*list of dissemination-tutoring activities*")
	Author or co-author of: 9 *articles* presented in *international conferences;* 8 *articles* published in *international journals* (+ 1 under review);

		1 *book*; 3 *chapters*; 5 *posters* presented in *conferences* or *workshops*; 8 *contributions* presented in *national conferences / meetings*. Selected oral communications (please refer to my "*list of dissemination-tutoring activities*") 7 *invited* talks/presentations/seminars; 2 *selected* talks;
Memberships and committees	Membership in scientific societies - *Member of IEEE - Institute of Electrical and Electronics Engineers.* (Society affiliations: *Computational Intelligence Society, Signal Processing Society, IEEE brain community*) - *Full member* of *AES - Audio Engineering Society.* - *Ordinary member* of *SIREN* (*Società Italiana REti Neuroniche*). - *Member* of *ET* - National group of *ElecTrical Engineering Researchers.* Participation in national and international Committees *International dissertation committees:* - Doctoral committee member as *International expert,* at the *Complutense University of Madrid (UCM), 14 Sept 2015.* Other evaluation committees: - *Honorary fellowship (cultore della materia*) for the disciplinary sectors *Electrical Circuits (Elettrotecnica), Industrial Electrical Technology (Elettrotecnica Industriale), Industrial Electromagnetic Compatibility (Compatibilità Elettromagnetica Industriale),* from 2010. *University of Rome "Tor Vergata*". - Committee member for State examination. Fields: *Maths, Physics, Electrical Circuits, Electrical and Electronic Systems.* Organization: *"Ministero dell'Istruzione, dell'Università e della Ricerca" Period: 2011-2013.* - Committee member of nearly all the dissertation sessions of the *Master in Audio Engineering,* held at the *University of Rome "Tor Vergata" - Dept. of Electronics Engineering,* in the period 2010-2016. *Editorial review boards:* - Review Editor for "*Frontiers in Human Neuroscience*" (part of *Frontiers in Neuroscience*), - from year 2018. - *Reviewer* for "*Neurocomputing*", Elsevier - year 2018. - *Reviewer* for *"Transactions on Emerging topics in Computing (TETCSI)",* IEEE - from year 2016. - *Reviewer* for "*Transactions on Neural Networks and Learning Systems (TNNLS)*", IEEE - from year 2015. - *Reviewer* for "*Smart Innovation, Systems and Technologies*", Springer - year 2015. - *Reviewer* for "*Journal of Pattern Recognition and Intelligent Systems (PRIS)*", The World Academic Publishing - from year 2013. - *Reviewer* for "*Asian Journal of Computer and Information Systems (AJCIS)*", Asian Online Journals - from year 2013. *Conference committees:* - *Program Committee member at MET 2017 (4rd International Conference on Materials and*

Engineering Technology), December 22-24, 2017. Sanya, China.

- Program Committee member at MET 2016 (3rd International Conference on Materials and Engineering Technology), December 2-4, 2016. Sanya, China.

- Review Committee member at *IEEE TAEECE 2015* (*3rd International Conference on Technological Advances in Electrical, Electronics and Computer Engineering*), April 29 - May 1, 2015; Beirut, Lebanon.

- Review Committee member at *WIRN 2014* (*24th Italian Workshop on Neural Networks*), May 15-16, 2014; Vietri sul Mare (Salerno), Italy.

Organization of events:

- Organizator of ≈20 workshops and seminars given by relevant companies (*Dolby, Genelec, Shure, Earthworks audio,* etc.) and guests (*Eric Blackmer, etc.*) for the *MIS* (*Master in Ingegneria del Suono e dello Spettacolo*) - Audio Engineering Program at the *University of Rome "Tor Vergata"* - Dipartimento di Ingegneria Elettronica. Field: *audio signal processing. Period: 2010-2018.*

- Technical support at the *II Symposium of Magnetoencephalography: from research to clinical Applications* (Organized by *UCM, Elekta Neuromag* and *UPM*), Madrid, 27 Jan 2017.

Supervision of theses	Supervisor or co-supervisor of more than 20 dissertations in *Electronics, Biomedical* or *Audio Engineering* at the *University of Rome "Tor Vergata",* from year 2010. Topics: *Event-driven simulation of Spiking Neural Networks; autonomous navigation for visually-impaired people; virtual input device-based touchless musical instruments; gesture following-based sound-painting interaction in museums; ANN-based chord- and key-modulation recognition from audio files.* (Please refer to my "*list of dissemination-tutoring activities"*)
Music/art	Participation to art events: - *Lazio creativo* (2017) - Selection of the most innovative and interesting talents and projects of the Latium territory. Interactive installation. Title: "Folies de *SeeInteracting*". - *TerniFestival* - International performing arts festival, Terni (2015), as electronics/sound engineer. Interactive installation. Title: "*Folies* de *SeeInteracting*". - *LPM* - International Live Performers Meeting, Rome (2013) as electronics/sound engineer. Interactive installation. Title: "*SeeInteracting sound spaces*". - *FAST* - International Festival of Contemporary Art, Terni (2011), as electronics/sound engineer. Interactive installation. Title: "*SeeInteracting* sound pictures". Ongoing projects: *Seeinteracting* - research project regarding 3D motion capture technologies applied to music, dance and other performing arts (website: http://www.seeinteracting.com)
Education and training	
Qualification Thesis title Organization	Ph.D. in *Engineering of sensor and learning systems* (winner of a 3-year grant), obtained on 13 Dec 2012. "Asynchronous Spiking Neural Networks, general paradigm and applications" *University of Rome "Tor Vergata"*
Qualification	Licensed *professional engineer* (Italian *esame di stato SENIOR*), year: 2012.
Qualification Thesis title Organization Training	Master's degree in *Electronic Engineering*, obtained on 22 Jul 2009. Field: *Very large scale integration circuits and systems*. "*Classification of EEG signals for mental task recognition*" *University of Rome "Tor Vergata".* Graduation apprenticeship performed in collaboration with the *Polyclinic hospital of Rome "Tor Vergata"* - *division of Neurophysiology*.
Qualification Thesis title Organization	Laurea degree in *Electronic Engineering*, obtained on 9 Oct 2006 "*Musical Key-modulation recognition, using Artificial Neural Networks*" *University of Rome "Tor Vergata".*

Training	Graduation apprenticeship performed at the *laboratory of Audio Engineering - University of Rome "Tor Vergata"*.

Participation in other relevant formative courses

Event	*1st ACLIMAGEN* meeting
Date	*23-24/5/2018*
Description	*"Teoría de grafos: aplicaciones a las técnicas de neuroimagen"* (Dr. Jorge Sepulcre); *"Machine Learning aplicado a neuroimagen"* (Drs. Joaquim Radua & Aleix Solanes)
Organization	Spanish Ministry of Economy and Competitiveness
Event	Human Brain Project Young Researcher Event (YRE2017)
Date	12-13/09/2017
Description	training on the ICT Infrastructure offered and developed by the HBP (~20h)
Organization	*Campus Biotech* (Geneva, Switzerland).
Event	Short courses "*Executive functions*" and "*Memory*"
Date	30/03 and 01/06 2017
Description	training in the field of "*Cognitive neuroscience*"
Organization	*CTB - Center for Biomedical Technology (Technical University & Complutense University,* Madrid)
Event	Workshop "*CapoCaccia Cognitive Neuromorphic Engineering program*";
Date	28/04 to 05/10 2014
Description	Training in the field of "*Neuromorphic engineering*" (2-weeks full-immersion).
Organization	*INI - Institute of Neuroinformatics* (*ETH University* & *UZH University*, Zurich).
Event	Short course "*Bioelectric & Biomagnetic signals from the brain.*
Date	15/06/2011
Description	Training in the field of "*Brain signal reconstruction*"
Organization	Doctorate school *F.Gasparini* (Naples, Italy*).*
Event	Course: "English language"
Date	certificate received on 08-15-1997)
Description	Communicative skills - comprehension
Organization	*Dublin language centre - Kilkenny college* (Kilkenny, Ireland)

Skills and competences

Native language	Italian
Other language	English
Other language	Spanish
Personal skills	Curiosity, determination, self-motivation.
Organizational skills	Both interaction and co-ordination substantiated skills.
Technical skills and competences	- Electrical and Electronic Engineering. - Simulation of spiking Neural Networks; - 2nd and 3rd generation Neural Networks for pattern recognition; - Bio-, audio-, video- signal processing, both in the time and frequency domains. - Audio Data Compression;
Knowledge of softwares:	O.S.: *Windows, Mac-os*. Programming and simulation: *Matlab* and related toolboxes, *PSpice, Neuron*. Moderate knowledge of *C++*. Audio analysis and editing: *Max/MSP, Avid Pro-tools, Apple Logic, Steinberg Cubase, Spear, Propellerhead Reason, AU* & *VST* technologies*, Adobe Audition, Ableton live,* etc. Graphics: *Adobe Suite.* Other classic software suites.
Driving license	Italian *B*-Category
Willingness to travel	Yes. Both short and long stay.