Curriculum Vitae

SURNAME, NAME	SANTUCCI, VIERI GIULIANO
ADDRESS	Via San Martino della Battaglia 44, 00185 Roma, Italy
E-MAIL/TEL.	vieri.santucci@istc.cnr.it / +39 0649936279
NATIONALITY	Italian
DATE OF BIRTH	11th April 1984

Employment

MAY 2010 - PRESENT	Researcher
INSTITUTION	Institute of Cognitive Science and Technologies, Italian National Council of Research
LAB	Laboratory of Computational Embodied Neuroscience
ACTIVITY	Development of artificial systems, in simulated and robotic environments, with particular interest for autonomous skill learning and motivational processes.
TECHNIQUES	Artificial neural networks, machine learning (mainly reinforcement learning algorithms)

Education

JULY 2016	Ph.D. in Computer Science, Plymouth University, Plymouth, UK
FEB. 2009	M.Sc. in Theories and Techniques of Knowledge, Faculty of Philosophy, University of Rome "La Sapienza", Italy
DEGREE	110/110 cum laude
DEC. 2006	B.Sc. in Philosophy, University of Pisa, Italy
DEGREE	110/110 cum laude

Experience

RESEARCH PROJECTS

2017(SUBM.)-2018 (ACCEPTED)	IMPACT - Intrinsically Motivated Planning Architecture for Curiosity-driven roboTs. European Space Agency project
ACTIVITY	Co-writing of the proposal
NOV. 2016 - PRESENT	GOAL - Robots. H2020-FETOPEN European project
ACTIVITY	Co-writing of the winning proposal and research activity

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MAY 2010 - APRIL 2013	IM-CLeVeR - Intrinsically Motivated Cumulative Learning Versatile Robots. FP7-ICT European project
ACTIVITY	Research activity on the topics of the project

EVENTS ORGANIZATION

OCT. 2017	Third International Workshop on Intrinsically Motivated Open-ended Learning (IMOL 2017), Rome. www.imol-conf.org/
SEPT. 2017	First workshop of Ethics and Future of Artificial Intelligence (E-FAI 2017), Lisbon. www.e-fai.org/

TEACHING

NOV. 2015	Invited lecture in the course on "Artificial Intelligence and introduction to programming", Università degli Studi Suor Orsola Benincasa, Napoli, Italy.
MAY. 2012	Invited lecture in the course on "Philosophy of Science", Faculty of Philosophy, Università di Roma "La Sapienza", Roma, Italy
MAY. 2011	Invited lecture in the course on "Philosophy of Science", Faculty of Philosophy, Università di Roma "La Sapienza", Roma, Italy
MAY. 2011	Teacher at the IM-CLeVeR Spring School on the topics of "Intrinsic Motivations, abstract representations of sensorimotor data, hierarchical architectures and cumulative learning". Capocaccia, Italy.

INVITED SPEAKER

OCT. 2014	The Donders Discussions (International Conference on Cognition and Neuroscience), Nijmegen, Holland.
TITLE OF THE PRESENTATION	"Learning multiple skills with Intrinsic Motivations: computational embodied models."
JUNE. 2014	Workshop on pathological gambling, Milan, Italy
TITLE OF THE PRESENTATION	"Phasic dopamine and reinforcement learning: possible applications to robotics"

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TECHNICAL SKILLS

PROGRAMMING   c, c++, Python, Matlab, QT libraries

SOFTWARE   Office suite, Latex, Adobe suite, Inkscape, Gazebo (robotic simulator), YARP, Box2D

LANGUAGES

ITALIAN   Mother Tongue

ENGLISH   Fluent (TOEFL 2010)

FRENCH   Scholastic

LIST OF PUBLICATIONS

JOURNAL
- Baldassarre G., Santucci, V.G., Cartoni, E., Caligiore, D. (2017) The architecture challenge: Future artificial-intelligence systems will require sophisticated architectures, and knowledge of the brain might guide their construction. Behavioral and Brain Sciences.
- Santucci, V. G., Baldassarre, G., Mirolli, M. (2016), ''GRAIL: a goal-discovering robotic architecture for intrinsically-motivated learning', IEEE Transactions on Cognitive and Developmental Systems.
- Santucci, V. G., Cilia, D. N., Pezzulo, G. (2015), "The status of the simulative method in cognitive science: current debates and future prospects", Paradigmi, 3, pp. 47-66.
- Mirolli, M., Santucci, V. G., Baldassarre, G. (2013), "Phasic dopamine as a prediction error of intrinsic and extrinsic reinforcements driving both action acquisition and reward maximization: A simulated robotic study", Neural Networks 39(0), 40–51.
- Santucci, V. G., Baldassarre, G., Mirolli, M. (2013), "Which is the best intrinsic motivation signal for learning multiple skills?", Frontiers in Neurorobotics 7(22).

BOOK CHAPTER
- Santucci, V. G., Baldassarre, G., Mirolli, M. (2014), "Cumulative learning through intrinsic

reinforcements", in S. Cagnoni, M. Mirolli & M. Villani, eds, "Evolution, Complexity and Artificial Life", Springer-Verlag, Berlin, pp. 107–122.

PROCEEDINGS
- Seepanomwan, K., Santucci, V. G., Baldassarre (2017), "Intrinsically Motivated Discovered Outcomes Boost User's Goals Achievement in a Humanoid Robot", in "Development and Learning and Epigenetic Robotics (ICDL-EpiRob), 2017 Joint IEEE International Conferences on", in press.

- Santucci, V. G., Baldassarre, G., Mirolli, M. (2014), "Autonomous selection of the "what" and the "how" of learning: An intrinsically motivated system tested with a two armed robot", in ICDL-EpiRob 2014, pp. 434–439.

- - Santucci, V. G., Baldassarre, G., Mirolli, M. (2013), "Intrinsic motivation signals for driving the acquisition of multiple tasks: A simulated robotic study", in 'Proceedings of the 12th International Conference on Cognitive Modelling (ICCM)', pp. 1–6.

- Santucci, V. G., Baldassarre, G., Mirolli, M. (2012), "Intrinsic motivation mechanisms for competence acquisition", in ICDL-EpiRob 2012, pp. 1–6.

- Santucci, V. G., Baldassarre, G., Mirolli, M. (2012), "A bio-inspired learning signal for the cumulative learning of different skills", in 'Proc. of the Italian Workshop on Artificial Life and Evolutionary Computation', pp. 1–12.

- Santucci, V. G., Baldassarre, G., Mirolli, M. (2010), "Biological cumulative learning through intrinsic motivations: a simulated robotic study on the development of visually-guided reaching", in 'Proceedings of the Tenth International Conference on Epigenetic Robotics', Lund University Cognitive Studies Lund, pp. 121–127.

PH.D. THESIS
- Santucci, V. G. (2016), "Autonomous learning of multiple skills through intrinsic motivations: A study with computational embodied models". Ph.D. thesis

in Computer Science. School of Computing, Electronics and Mathematics, University of Plymouth, Plymouth (UK).

GENERAL AUDIENCE

- Santucci, V. G. (2017), "L'errore di Musk e la peggiore risposta possibile all'era dell'intelligenza artificiale", www.agi.it, Agenzia Giornalistica Italia (AGI)
- Santucci, V. G. (2017), "Come fa un computer a bluffare a poker (e vincere 1,7 milioni)", www.agi.it, Agenzia Giornalistica Italia (AGI)
- Baldassarre, G., Santucci, V. G. (2016), "Future robots will learn through curiosity and self-generated goals", www.robohub.org.