Raffaele Di Giacomo www.raffaeledigiacomo.com

□ Education (Selected)

2013-2017

Post Doctoral Scholar, **Mechanical and Process Engineering** Swiss Federal Institute of Technology (ETH Zurich), Switzerland 2013 Ph.D. in Information Engineering University of Salerno, Italy 2009 Master Degree in Electronic Engineering, University of Salerno, Italy 1999 Diploma of Music Composition (4th year), Potenza Conservatory, Italy

□ Work Experience (Selected)

from May 2017 **R&D Engineer, Sensor Innovation** Sensirion AG, Stäfa, Zurich

2007-2008 Internship Research study and application of innovative EMI materials Avago Technologies, Turin, Italy

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- Languages Italian, English
- □ Skills & Competences
- Product development
- Sensors
- **Analog Electronics** •
- Data Science (Python)
- Biology
- Critical thinking
- Resiliency
- Innovativeness
- Inventiveness
- Ingenuity

Interests

Data Science, Artificial intelligence, Optics and Photonics, Robotics, Finance, Bioengineering, Material Science, Developmental Biology

Selected Workshops

2015 TX-TL workshop, Invited by prof. Richard Murray **Control & Dynamical Systems** California Institute of Technology (Caltech), California, USA

Selected Publications

R. Di Giacomo *et al.* "Biomimetic temperature sensing layer for artificial skins", Science Robotics, 2, Vol. 2, Issue 3, DOI:10.1126/scirobotics.aai9251, (2017)

Highlighted in M. S. Lavine, "Sensitive skin for feeling the heat", Science, Vol. 355, Issue 6324, pp. 490, (2017)

R. Di Giacomo et al., "Plant nanobionic materials with giant temperature response mediated by pectin-Ca2+", Proceedings of the National Academy of Sciences of the United States of America Vol. 112, Issue (15), Pages 4541-4545 (2015)

Highlighted in R. Mark Wilson "Tobacco cells infused with carbon nanotubes feel the heat", Phys. Today Vol. 68, Issue (6), Page 15, (2015)

Selected Presentations at Conferences

Gordon Research Conferences

Multifunctional Materials & Structures 2016 Ventura CA, USA R. Di Giacomo, et al. "Biomimetic temperature sensing layer for artificial skins"

Materials Research Society Fall 2015 Boston, MA, USA R. Di Giacomo, et al. "Pectin mediated temperature sensitive materials"

Selected Patents

R. Di Giacomo et al. "Gel based thermal sensors." European Patent Application: EP15195729.7, 2015. PCT/EP2016/056642 (2016).

Selected Seminars

1 Dec 2015

R. Di Giacomo, "From cyberwood to artificial membranes biomimicking vipers' infrared sensing" Special Environmental Sciences Seminar, Massachusetts Institute of Technology (MIT), MA, USA