Raffaele Di Giacomo

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Work Experience (Selected)

from 2017

R&D Engineer, Sensor Innovation Sensirion AG, Stäfa, Zurich, Switzerland

2013-2017

Post Doctoral Scholar,

mechanical and process engineering

Swiss Federal Institute of Technology (ETH Zurich), Data Science

Switzerland

2013

Consultant,

electronic technologies for railway applications.

Dept. of Industrial Engineering University of Salerno, Italy

2007-2008

Intern,

innovative EMI materials

Avago Technologies, Turin, Italy

Education (Selected)

2013

Ph.D. in Information Engineering

University of Salerno, Italy

2009

Master Degree in Electronic Engineering,

University of Salerno, Italy

Diploma of Music Composition (4th year),

Carlo Gesualdo Da Venosa Conservatory, Italy

Languages Italian, English, German (basic)

Competences

Product development

Sensors Design

Analog Electronics Design

Flexible electronics

Bio-Sensors and Bio-materials Design

Skills

Critical thinking Innovativeness Inventiveness Ingenuity Resiliency

Interests

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

Workshops (Selected)

TX-TL workshop, Invited by prof. Richard Murray

Control & Dynamical Systems

California Institute of Technology (Caltech),

California, USA

Publications (Selected)

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)

Presentations (Selected)

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"

Patents (Selected)

C. Daraio, R. Di Giacomo et al. "Gel based thermal sensors. US2018080830 (A1)

Seminars (Selected)

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