

FRANCESCO AMATO – CURRICULUM VITAE

PERSONAL INFO

Francesco Amato
 Address Via Conte Verde, 51
 00185 Roma (RM), Italy
 Nationality Italian
 E-mail f.amato@ieee.org
 Web page <http://www.francesco-amato.com>

ACADEMIC TITLES

Aug. 2012 - 6 May 2017 Ph.D in Electrical and Computer Engineering
Georgia Institute of Technology. Atlanta, GA, USA
 Thesis Title “Achieving hundreds-meter ranges in low powered RFID systems with quantum tunneling tags”
 Advisor Prof. Gregory D. Durgin

Nov. 2006 - 26 Feb. 2009 Laurea Specialistica in Ingegneria delle Telecomunicazioni
Università degli Studi di Roma Tor Vergata. Roma, Italy
 Thesis Title “Experimental setup for RFID radio sensors”
 Advisor Prof. Gaetano Marrocco
 Final Score 110 *cum laude*

Sept. 2003 - 10 Nov. 2006 Laurea in Ingegneria delle Telecomunicazioni
Università degli Studi di Roma Tor Vergata. Roma, Italy
 Thesis Title “Processing of high resolution polarimetric SAR data”
 Advisor Prof. Domenico Solimini
 Final Score 110 *cum laude*

March 2015 Teaching certificate “Tech to Teaching”
Center for the Enhancement of Teaching and Learning,
Georgia Institute of Technology. Atlanta, GA, USA

PROFESSIONAL ACTIVITIES

Sept. 2021 - present **Tenured teacher (docente di ruolo)**
ITIS Galileo Galilei. Roma, Italy.
 Computer Science and Engineering (Scienze e Tecnologie Informatiche)

Sept. 2020 – Aug. 2021 **High School Instructor**
ITIS Galileo Galilei. Roma, Italy.
 Computer Science and Engineering (Scienze e Tecnologie Informatiche)

Dec. 2018 – Sept. 2020 **Research Scientist**
Pervasive Electromagnetics Lab
 Università degli Studi di Roma Tor Vergata. Roma, Italy

- Designed and Tested wearable and epidermal antennas and RFID sensors for mmWave frequencies and applications (5G);
- realized UHF epidermal RFID antennas for medical applications: wireless plasters for i) temperature monitoring and ii) recovery of sense of touch;
- developed a portfolio of Android Apps for interfacing the RFID sensors with users' phones.

Oct. 2017 – Nov. 2018 **Research Scientist**
Digital & Microwave Photonics Group
Institute of Communication, Information and Perception Technologies

Sant'Anna School of Advanced Studies. Pisa, Italy

- Designed (in ADS and EAGLE) and tested a microwave electronic board for Ultra-Fast Beam Steering of a Phased-Array Antenna Based on Packaged Photonic Integrated Circuits;
- development and test of a Photonic Radar for monitoring applications;
- design (in ADS) of a tunnel diode-based QAM backscattering RFID tag.
Project funded by Fondazione Cassa di Risparmio di Pistoia e Pescia, Italy;
- Feasibility study (in VPI) of a photonic radar network in automotive applications.
Project funded by Autoliv, Sweden.

July 2017 – Sept. 2016

Scholarship Holder

CNIT (Consorzio Nazionale Interuniversitario per le Telecomunicazioni), Pisa, Italy

- Comparative study between Lidar and Radar technologies for rail crossing monitoring systems.
Project funded by Rete Ferroviaria Italiana (RFI), Italy.

Aug. 2012 – Dec. 2016

Graduate Research Assistant

School of Electrical and Computer Engineering

Georgia Institute of Technology. Atlanta, GA, USA.

- Designed (with ADS CAD) and tested (on VNA and Spectrum Analyser) a high gain, low powered, reflection amplifier with tunnel diode for long range semi-passive RFID tags;
- developed a computer software and GUI interface (in MATLAB) to assist in the design of an open highway tolling system using purely passive 915 MHz RFID tags (designed with HFSS and tested on a VNA) affixed to the windshield of each vehicle.
Project funded by Intel Corp., Hillsboro, OR, USA;
- designed (with Eagle CAD) and assembled a compact, portable, frequency hopping 5.8 GHz RFID reader compliant with FCC regulations. The reader mounted an MSP430 microcontroller programmed in C.
Project funded by National Cash Register Corp. – NCR, Norcross, GA, USA.

May – Aug. 2015

Researcher

Intel Labs. Santa Clara, CA, USA.

Experimental analysis (in MATLAB) for a Human Body communication channel.

Oct. 2009 – Nov. 2011

Ground System Engineer

SES satellite. Château de Betzdorf, Luxembourg.

- Developed a reflector feed array receiver to miniaturize parabolic dishes for direct to home communications while improving the signal reception. Signal reception was improved by combining both antenna design and signal processing techniques.
Project funded by the European Space Agency – ESA;
- design of ground stations for satellite communications;
- procurement and project management to deploy ground stations in Vietnam

May 2009 – Aug. 2009

Intern

Codin S.p.a. Roma, Italy.

- Design of Data Base Management Systems (with MySQL and Oracle);
- use of client-based technologies: Javascript, HTML, XML, CSS;
- use of server-based technologies: PHP, Apache;
- training on Java, C, C++ and Python.

FELLOWSHIPS, HONORS AND AWARDS

- 2020 *Bell Labs Prize Award*, third place (8.000 \$, [link](#)),
Bell Labs, Murray Hill, New Jersey, USA.
- 2019 *Clive Hohberger Technology Award*,
AIM Global ([link](#)).
- 2019 *Best Paper Award* (1st place, www.2019.ieee-rfid.org/),
IEEE International Conference on RFID. Phoenix, Arizona, USA.
- 2019 *Best Paper Award* (3rd place, www.bhi-bsn-2019.org/bsn-2019-awards/),
IEEE International Conference on Wearable and Implantable Body Sensor Networks (BSN), Chicago, IL, USA.
- 2018 *Giovani@RicercaScientifica* (52.300 €, [link](#)),
Fondazione Cassa di Risparmio di Pistoia e Pescia.
- 2017 *Marie Skłodowska-Curie Seal of Excellence* “High-quality project proposal in a highly competitive evaluation process” for the project proposal titled: “IoT Backscattering Sensors for Precision Agriculture Applications”.
- 2015 *William C. Brown Fellowship* (3.000 \$),
Georgia Institute of Technology. Atlanta, GA, USA.
- 2015 *Research travel award* (1.500\$),
Career, Research, Innovation, Development Conference
Georgia Institute of Technology. Atlanta, GA
- 2015 *Best Student Paper Award* ([link](#)),
IEEE International Conference on RFID-Technologies and applications (RFID-TA).
Tokyo, Japan.
- 2013 - 2014 *GoStem Fellowship* (12.000 \$),
Georgia Institute of Technology. Atlanta, GA.
- 2014 *Innovation Competition*, finalist,
Georgia Tech Research and Innovation Conference (GTRIC)
Georgia Institute of Technology. Atlanta, GA, USA.
- 2012 *Fulbright Fellowship* (30.000 \$),
USA Gov. – Bureau of Educational and Cultural Affairs.
- 2009 *Master Thesis award* “Sebastiano and Rita Raeli” (5.000 €),
Università degli Studi di Roma Tor Vergata. Roma, Italy.

ACCADEMIC TEACHING APPOINTMENTS

- Jan.– Aug. 2016 **Instructor of Record**
School of Electrical and Computer Engineering,
Georgia Institute of Technology. Atlanta, GA, USA.
Course: Circuits and Electronics, ECE 3710 (students’ evaluations: [link](#))
Teaching Approach: Flipped Classroom.
- Aug. – Dec. 2015 **Teaching Assistant**
School of Electrical and Computer Engineering,
Georgia Institute of Technology. Atlanta, GA, USA.
Course: Antenna Engineering, ECE 4730
Prepared and taught 15% of the course material (example of lesson plan, [link](#))
Teaching Approach: Flipped Classroom
- Academic year 2013 – 2015 **Research Advisor**
School of Electrical and Computer Engineering,
Georgia Institute of Technology. Atlanta, GA, USA.
Research project: “Wireless power energy harvesting through 3D printed microwave circuits”
- Jan. - May 2013 **Teaching Assistant**
School of Electrical and Computer Engineering,
Georgia Institute of Technology. Atlanta, GA, USA.
Course: Electromagnetics, ECE 3025
Preparation of teaching material for “flipped classrooms”

EDUCATIONAL CONTRIBUTIONS

- Antenna Engineering (ECE4730) and Circuits and Electronics (ECE 3710) classes taught at the Georgia Institute of Technology, Atlanta (USA). Example of teaching material available at: www.francesco-amato.com/ece-4730-antenna-engineering/
www.francesco-amato.com/ece-3710-circuits-and-electronics/
- Seminars on 5G cellular networks for Antenna Engineering Class at Tor Vergata University, Rome (Italy). Material available at: www.francesco-amato.com/5g/
- Teaching material on Informatics used at ITIS Galileo Galilei, Roma, Italy, available at: www.francesco-amato.com/informatics/

I have supervised industry and research projects of undergraduates and visiting graduate students at the Georgia Institute of Technology as well as high school students at Meadowcreek High School, Norcross (GA).

LAB EQUIPMENTS & PROGRAMMING

Hardware and Lab equipment	Vector Network Analyzer; spectrum analyzer; signal generator; waveform generator; power meter; oscilloscope; microcontrollers (e.g.: MSP430). USRP, Software Defined Radios.
Client and Server based technologies	Android Studio; Java; Javascript; HTML; XML; CSS; PHP; Apache; MySQL; Oracle C; C++; Python; MATLAB; Android App Development.
CAD software	Eagle; ADS; HFSS; CST; VPI; AutoCAD.
Protocols and communication methods	Protocols for the ISO/OSI standard (e.g.: TCP/IP); medium access methods (e.g.: CMA/CD); EPC Gen2.

LANGUAGES

Italian	Fluent
English	Fluent
French	Pre-advanced (C1)
German	Intermediate (B1)

ORGANIZATION of INTERNATIONAL CONFERENCES

Technical Program Committee Chair for:

- 2021 IEEE International Conference on RFID ([link](#))

Technical Program Committee Co-Chair for:

- 2021 IEEE International Conference on RFID, Technologies and Applications ([link](#))

Publicity Chair and Technical Program Committee Member for:

- 2020 IEEE International Conference on RFID. ONLINE ([link](#))
- 2019 IEEE International Conference on RFID – Technologies and Applications. Pisa, Italy ([link](#))
- 2019 IEEE International Conference on RFID. Phoenix, AZ ([link](#))
- 2018 IEEE International Conference on RFID. Orlando, FL ([link](#))
- 2017 IEEE International Conference on RFID. Phoenix, AZ ([link](#))

Volunteer Chair for:

- 2013 IEEE Globecom. Atlanta, GA ([link](#))

MEMBERSHIP in PROFESSIONAL SOCIETIES

2019 - present	Secretary and Treasurer for the IEEE Council on RFID (CRFID)
2017 – present	Young Professional Representative for the IEEE Council on RFID (CRFID)
2009 – present	Member, Institute of Electrical and Electronics Engineers (IEEE)
2009 – present	Member of the Engineer association of Rome, Italy

2006 - 2009 Public Relation Coordinator, Board of European Students of Technology (*BEST*),
Università degli Studi di Roma Tor Vergata. Roma, Italy.

EDITORIAL DUTIES

Reviewer for: *IEEE Sensors Journal*; *IEEE Antenna and Propagation Magazine*; *IEEE Transactions on Antennas and Propagation*; *IEEE Transactions on Wireless Communications*, *IEEE Microwave Theory and Techniques Letters*; *IEEE Journal on Radio Frequency Identification*.

PUBLICATIONS

Ph.D Dissertation

Amato F., *Achieving hundreds-meter ranges in low powered RFID systems with quantum tunneling tags*.
School of Electrical and Computer Engineering.
Georgia Institute of Technology. Atlanta, GA, USA.
Link: <https://smartech.gatech.edu/handle/1853/58228>

On International journals

- C. Qi, **F. Amato**, B. Kihei and G. D. Durgin, "*Fine-scale Phase-based Ranging Through Walls and Obstructions Using Tunneling RFID Tags*," in *IEEE Journal of Radio Frequency Identification*, doi: 10.1109/JRFID.2021.3096221.
- C. Qi, **F. Amato**, M. Alhassoun and G. D. Durgin, "*A Phase-Based Ranging Method for Long-Range RFID Positioning With Quantum Tunneling Tags*," in *IEEE Journal of Radio Frequency Identification*, vol. 5, no. 2, pp. 163-173, June 2021, doi: 10.1109/JRFID.2020.3041419.
- C. Miozzi, **F. Amato** and G. Marrocco, "*Performance and Durability of Thread Antennas as Stretchable Epidermal UHF RFID Tags*," in *IEEE Journal of Radio Frequency Identification*, vol. 4, no. 4, pp. 398-405, Dec. 2020, doi: 10.1109/JRFID.2020.3001692.
- F. Camera, C. Miozzi, **F. Amato**, C. Occhiuzzi and G. Marrocco, "*Experimental Assessment of Wireless Monitoring of Axilla Temperature by Means of Epidermal Battery-Less RFID Sensors*," in *IEEE Sensors Letters*, vol. 4, no. 11, pp. 1-4, Nov. 2020, Art no. 6002304, doi: 10.1109/LSSENS.2020.3036486.
- F. -Y. Wang *et al.*, "*IEEE Council on Radio-Frequency Identification: History, Present, and Future Vision*," in *IEEE Journal of Radio Frequency Identification*, vol. 4, no. 3, pp. 170-175, Sept. 2020, doi: 10.1109/JRFID.2020.3016166.
- F. Amato**, C. Occhiuzzi and G. Marrocco, "*Epidermal Backscattering Antennas in the 5G Framework: Performance and Perspectives*," in *IEEE Journal of Radio Frequency Identification*, vol. 4, no. 3, pp. 176-185, Sept. 2020, doi: 10.1109/JRFID.2020.2998082. **Invited.**
- G. Serafino, **F. Amato**, S. Maresca, L. Lembo, P. Ghelfi and A. Bogoni, "*Photonic approach for on-board and ground radars in automotive applications*," in *IET Radar, Sonar & Navigation*, vol. 12, no. 10, pp. 1179-1186, 10 2018. doi: 10.1049/iet-rsn.2018.5017. **Invited.**
- F. Amato**, C. W. Peterson, B. P. Degan and G. D. Durgin, "*Tunneling RFID Tags for Long-Range and Low-Power Microwave Applications*," in *IEEE Journal of Radio Frequency Identification*, vol. 2, no. 2, pp. 93-103, June 2018. doi: 10.1109/JRFID.2018.2852498.
- F. Amato**, H. M. Torun and G. D. Durgin, "*RFID Backscattering in Long-Range Scenarios*," in *IEEE Transactions on Wireless Communications*, vol. 17, no. 4, pp. 2718-2725, April 2018. doi: 10.1109/TWC.2018.2801803.
- P. J. Hawrylak; G. D. Durgin; **F. Amato**; M. Alhassoun, "*RFID Virtual Journal - Issue 13*," in *IEEE RFID Virtual Journal*, vol., no.13, pp., August 2017. doi: 10.1109/RFIDVJ.2017.0000013.

Peer Reviewed International Conferences

- C. Qi, **F. Amato** and G. D. Durgin, "A Real-time RFID Positioning System Using Tunneling Tags," 2021 IEEE International Conference on RFID (RFID), 2021, pp. 1-6, doi: 10.1109/RFID52461.2021.9444327.
- C. Qi, **F. Amato**, Y. Guo, Y. Zhang and G. D. Durgin, "A Backscatter Channel Sounder Using Tunneling RFID Tags," 2021 IEEE International Conference on RFID (RFID), 2021, pp. 1-7, doi: 10.1109/RFID52461.2021.9444368.
- C. Qi, **F. Amato**, B. Kihei, G. D. Durgin "Fine-scale Through-Wall Positioning Using Tunneling RFID Tags," 2020 IEEE International Conference on RFID (RFID), Orlando, FL, USA, 2020, pp. 1-7, doi:10.1109/RFID49298.2020.9244871.
- F. Amato**, A. Di Carlofelice, C. Occhiuzzi, P. Tognolatti, G. Marrocco, "S-band Testbed for 5G Epidermal RFIDs," 2020 XXXIII General Assembly and Scientific Symposium (GASS) of the International Union of Radio Science (Union Radio Scientifique Internationale-URSI), Rome, Italy, 2020, pp. 1-3, doi:10.23919/URSIGASS49373.2020.9232255.
- K. Gumber, **F. Amato**, C. Dejous, S. Hemour, "Nonlinear Negative Resistance-based Harmonic Backscatter," 2020 IEEE/MTT-S International Microwave Symposium (IMS), Los Angeles, CA, USA, 2020, pp. 603-606, doi:10.1109/IMS30576.2020.9223877.
- F. Amato**, C. Occhiuzzi, G. Marrocco, "Performances of a 3.6 GHz Epidermal Loop for Future 5G-RFID Communications", IEEE 2020 14th European Conference on Antennas and Propagation (EuCAP), Copenhagen, Denmark, 2020, pp. 1-2, doi: 10.23919/EuCAP48036.2020.9135207.
- F. Amato** and S. Hemour, "The Harmonic Tunneling Tag: a Dual-Band Approach to Backscattering Communications," 2019 IEEE International Conference on RFID Technology and Applications (RFID-TA), Pisa, Italy, 2019, pp. 244-247, doi: 10.1109/RFID-TA.2019.8891996.
- F. Amato**, C. Miozzi, S. Nappi and G. Marrocco, "Self-Tuning UHF Epidermal Antennas," 2019 IEEE International Conference on RFID Technology and Applications (RFID-TA), Pisa, Italy, 2019, pp. 380-383, doi: 10.1109/RFID-TA.2019.8892222.
- F. Amato**, S. Amendola and G. Marrocco, "Upper-bound Performances of RFID Epidermal Sensor Networks at 5G Frequencies," 2019 IEEE 16th International Conference on Wearable and Implantable Body Sensor Networks (BSN), Chicago, IL, USA, 2019, pp. 1-4. doi: 10.1109/BSN.2019.8771071. **Best Paper Award, 3rd place.**
- C. Qi, **F. Amato**, M. Alhassoun and G. D. Durgin, "Breaking the Range Limit of RFID Localization: Phase-based Positioning with Tunneling Tags," 2019 IEEE International Conference on RFID (RFID), Phoenix, AZ, USA, 2019, pp. 1-8. doi: 10.1109/RFID.2019.8719276. **Best Paper Award, 1st place.**
- S. Maresca et al., "Photonics for Coherent MIMO Radar: an Experimental Multi-Target Surveillance Scenario," 2019 20th International Radar Symposium (IRS), Ulm, Germany, 2019, pp. 1-6. doi: 10.23919/IRS.2019.8768096.
- L. Lembo et al., "In-Field Demonstration of a Photonic Coherent MIMO Distributed Radar Network," 2019 IEEE Radar Conference (RadarConf), Boston, MA, USA, 2019, pp. 1-6. doi: 10.1109/RADAR.2019.8835849.
- F. Amato** et al., "Ultra-Fast Beam Steering of a Phased-Array Antenna Based on Packaged Photonic Integrated Circuits," 2018 European Conference on Optical Communication (ECOC), Rome, 2018, pp. 1-3. doi: 10.1109/ECOC.2018.8535402.
- F. Amato** and G. D. Durgin, "Tunnel Diodes for Backscattering Communications," 2018 2nd URSI Atlantic Radio Science Meeting (AT-RASC), Meloneras, 2018, pp. 1-3. doi: 10.23919/URSI-AT-RASC.2018.8471622.
- G. Serafino et al., "Photonics for High-Frequency Ultra-Wideband and Frequency-Agile RF Transmitters," 2018 2nd URSI Atlantic Radio Science Meeting (AT-RASC), Meloneras, 2018, pp. 1-2. doi: 10.23919/URSI-AT-RASC.2018.8471448.
- G. Serafino et al., "Photonics for mmW signal generation," 2018 19th International Radar Symposium (IRS), Bonn, 2018, pp. 1-8. doi: 10.23919/IRS.2018.8448171.

B. Hussain, G. Serafino, **F. Amato**, C. Porzi, A. Bogoni and P. Ghelfi, "*Fast Photonics-Assisted Beamforming Network for Wide-Band, High Bit Rate 5G Communications*," 2018 International Topical Meeting on Microwave Photonics (MWP), Toulouse, 2018, pp. 1-4. doi: 10.1109/MWP.2018.8552884.

F. Amato, H. M. Torun and G. D. Durgin, "*Beyond the limits of classic backscattering communications: A quantum tunneling RFID tag*," 2017 IEEE International Conference on RFID (RFID), Phoenix, AZ, 2017, pp. 20-25. doi: 10.1109/RFID.2017.7945581.

M. Alhassoun, **F. Amato** and G. D. Durgin, "*A multi-modulation retrodirective feed network for backscatter communications*," 2017 IEEE 28th Annual International Symposium on Personal, Indoor, and Mobile Radio Communications (PIMRC), Montreal, QC, 2017, pp. 1-5. doi: 10.1109/PIMRC.2017.8292396.

F. Amato and G. D. Durgin, "*Signal-to-noise ratio measurements for IoT communications with quantum tunneling reflectors*," 2016 IEEE 3rd World Forum on Internet of Things (WF-IoT), Reston, VA, 2016, pp. 383-388. doi: 10.1109/WF-IoT.2016.7845420.

M. B. Akbar, **F. Amato**, A. Claessen and G. D. Durgin, "*Broadband backscatter based technique to identify the presence of skinning electronics on payment terminals*," 2016 IEEE Radio and Wireless Symposium (RWS), Austin, TX, 2016, pp. 141-144. doi: 10.1109/RWS.2016.7444387.

F. Amato et al., "*5.8 GHz energy harvesting of space based solar power using inkjet printed circuits on a transparent substrate*," 2015 IEEE International Conference on Wireless for Space and Extreme Environments (WiSEE), Orlando, FL, 2015, pp. 1-3. doi: 10.1109/WiSEE.2015.7393105.

F. Amato, C. W. Peterson, M. B. Akbar and G. D. Durgin, "*Long range and low powered RFID tags with tunnel diode*," 2015 IEEE International Conference on RFID Technology and Applications (RFID-TA), Tokyo, 2015, pp. 182-187. doi: 10.1109/RFID-TA.2015.7379815. **Best Student Paper Award, 1st place**

F. Amato, C. W. Peterson, B. P. Degnan and G. D. Durgin, "*A 45 μ W bias power, 34 dB gain reflection amplifier exploiting the tunneling effect for RFID applications*," 2015 IEEE International Conference on RFID (RFID), San Diego, CA, 2015, pp. 137-144. doi: 10.1109/RFID.2015.7113084.

M. B. Akbar, **F. Amato**, G. D. Durgin, G. Pisharody and S. - Suh, "*RFID tag load impedance measurement using backscattered signal*," 2015 IEEE International Symposium on Antennas and Propagation & USNC/URSI National Radio Science Meeting, Vancouver, BC, 2015, pp. 1762-1763. doi: 10.1109/APS.2015.7305270.

Grotz, J., Braun-Lois, A., Coutelier, T., Guedin, E., **Amato, F.**, Abraham, T., ... van der Wal, E. (2012). *MULTI INPUT LNB – DEMONSTRATOR OF A REFLECTOR FEED ARRAY RECEIVER FOR SATELLITE BROADCAST RECEPTION*. Presented at the 2nd Evolutions in Satellite Telecommunication Ground Segments Workshop on Satcom User Terminal Antennas, ESA/ESTEC, Noordwijk, The Netherlands. 3-5 October 2012.

G. Marrocco and **F. Amato**, "*Self-sensing passive RFID: From theory to tag design and experimentation*," 2009 European Microwave Conference (EuMC), Rome, 2009, pp. 001-004. doi: 10.23919/EUMC.2009.5296345.

Books (Chapters)

S. Amendola, C. Occhiuzzi, C. Miozzi, S. Nappi, **F. Amato**, F. Camera, G. Marrocco, "*Chapter 5 - UHF epidermal sensors: Technology and applications*," Editor(s): Edward Sazonov, Wearable Sensors (Second Edition), Academic Press, 2021, Pages 133-161, ISBN 9780128192467, <https://doi.org/10.1016/B978-0-12-819246-7.00005-X>.

G. Marrocco, C. Occhiuzzi, and **F. Amato** (2010) "*Sensor-Oriented Passive RFID*". In: Giusto D., Iera A., Morabito G., Atzori L. (eds) The Internet of Things. Springer, New York, NY, pp. 273 – 282, DOI: 10.1007/978-1-4419-1674-7_26.

Conference Presentations

Amato F., and Bogoni A., "*Photonics-based environment monitoring system for an enhanced prevention of landslide and structural failure risks*" **Keynote Speech** IEEE Optronix 2017: November 2017, Kolkata, India.

Amato F., Peterson C. W., Marshall B. R., and Morys M. M., “*Reflective Sensing with Tunnel Diodes Exploiting Tunneling Effect*”, **Poster presentation** Career; Research; Innovation and Development Conference (CRIDC) March 2015, Atlanta, GA, USA.

Amato F., and Rodrigues S. P., “*The Engineering Club; a project-based learning experience at Meadowcreek High School*”, **Poster presentation** Celebrating Teaching Day at Georgia Tech 2015, Atlanta, GA, USA.

Amato F., and Rodrigues S. P., “*Hands on Experiences to Enhance Learning at Meadowcreek High School*”, **Poster presentation** Celebrating Teaching Day at Georgia Tech 2014, Atlanta, GA, USA.

Amato F., and Durgin G. D., “*A tunnel diode reflection amplifier for RFID antennas*” **Poster presentation** IEEE RFID 2013, Orlando, Florida, USA.

Technical Reports

Amato F. “*Perizia di congruità economica dell'applicazione mobile DIGITAL MUSEUM e dei relativi contenuti grafici*”. For SMARTUPP SRL – February 2021. (*Confidential*)

Amato F. et al, “*Analisi Comparativa dei Sistemi PAI-PL in Omologazione*”. For Rete Ferroviaria Italiana (RFI) - November 2017, Sant’Anna School of Advanced Studies. (*Confidential*)

Amato F. et al., “*Analisi delle prestazioni dei sistemi Laser, Radar e Loop per rilevamento della libertà da veicolo nelle aree di passaggio a livello ferroviari.*” For Rete Ferroviaria Italiana (RFI) - October 2017, Sant’Anna School of Advanced Studies. (*Confidential*)

Akbar M. B., **Amato F.**, and Durgin G. D., “*Electromagnetic Integrity and Security Assay (ELISA)*”. For NCR Corp. - May 2015, Georgia Institute of Technology. (*Confidential*)

Akbar M. B., **Amato F.**, and Durgin G. D., “*Intel RFID Toll Tag Project: Phase I, Final Report*”. For NCR Corp. - May 2014, Georgia Institute of Technology. (*Confidential*)

OUTREACH

Maker Fair, European Ed. *Second Skin: bio integrated wireless sensors for the epidermal monitoring and reactivation of sensorial injuries* ([Link](#))
Roma, Oct. 2019

Second Skin Day, “*Second Skin day*”, *Convegno su nuovi dispositivi elettronici epidermici* ([Link](#))
Roma, Mar. 2019

PRESS

Dec. 2020 - Nasdaq ([link](#));
 - China Finance ([link](#));
 - Nokia ([link](#));
 - Georgia Tech ([link](#)), *Nokia announces 2020 Bell Labs Prize winners.*

Italy, Nov. 2020 - Il Messaggero ([link](#)): “*Covid, un cerotto riesce a monitorare la febbre da virus*”.
 Lo studio dell'università di Tor Vergata;
 - Il Mattino ([link](#)): “*Covid, un cerotto riesce a monitorare la febbre da virus*”. *Lo*
 studio dell'università di Tor Vergata;
 - INAIL ([link](#)): *Covid, un cerotto riesce a monitorare la febbre da virus. Lo studio*
 dell'università di Tor Vergata.

Georgia Tech, April 2019 - *Amato Honored with Clive Hohberger Technology Award* ([link](#));
 - *Qi Chosen For IEEE RFID 2019 Best Paper Award* ([link](#)).

Italy, April 2019 Sassilive.it
 Best Paper Award per il Tunneling Tag del Materano Francesco Amato al Georgia
 Institute of Technology di Atlanta ([link](#)).

- Italy, May 14, 2018 The U.S.-Italy Fulbright Commission,
MY FULBRIGHT EXPERIENCE at the Georgia Institute of Technology ([link](#)).
- Kolkata, Nov. 2, 2017 United News of India,
International Conference on opto-electronics 2017 presented by UEM & IEM ([link](#)).
- Kolkata, Nov. 2, 2017 NetIndia123 – The complete news portal,
International Conference on Opto-Electronics 2017 Presented by UEM & IEM. ([link](#)).

Autorizzo il trattamento dei miei dati personali ai sensi dell'art. 13 d. lgs. 30 giugno 2003 n°196 – “Codice in materia di protezione dei dati personali” e dell'art. 13 GDPR 679/16 – “Regolamento europeo sulla protezione dei dati personali”.

Roma, October 2021

Ing. Francesco Amato, Ph.D

Handwritten signature of Francesco Amato in black ink.