



Tommaso Addabbo, PhD

Associate Professor
Department of Information Engineering and Mathematics
University of Siena

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Curriculum Vitae

(Updated: June, 4th 2023)

Current Position

November 2019 - Present

Associate Professor of the Department of Information Engineering and Mathematics, University of Siena, Italy.

Italian SC-SSD: ING-INF01/ELETTRONICA (Electronic Engineering)

Research Activities

Since 2004, he has co-authored more than 140 scientific papers published in international peer-reviewed journals or conference proceedings. According to Google Scholar, he has been cited more than 1400 times, with an h-index of 20 and an i10-index of 45.

As a speaker, he has presented his research results in the most important international conferences organized by the IEEE Circuits & Systems Society and the IEEE Instrumentation & Measurements Society, among others.

His main research interests embrace the following topics:

- Nonlinear Circuits and Systems (Theory and Applications)
- Circuits and Systems for Hardware Security and Cryptography
- Front-End Electronics for Smart Sensing, Electronic Measurements and Sensor Signal Conditioning

Most of the research activities included theoretical modeling, experiments and design activities involving the following technologies

- CMOS Mixed-Signal Integrated Circuits
- Programmable Logic Devices (FPGAs, PLDs)
- Reconfigurable IO Programmable Devices and Systems
- Different kind of Sensors and Sensing Materials

List of Publications

(Scopus Index):

<https://www.scopus.com/authid/detail.uri?authorId=14824698700>

Scientific Responsibilities

Memberships and Affiliations

- Secretary of the IEEE Nonlinear Circuits and Systems Technical Committee
- IEEE Member
- Member of the IEEE Circuits and Systems Society
- Member of the Italian Society of Chaos and Complexity
- Member of the Italian Electronics Society (SIE)
- Invited Member of the Accademia dei Fisiocritici di Siena

Journal Editor

- Associated Editor for the International Journal of Circuit Theory and Applications (Wiley) (Nov. 2016 - Present)
- Guest Editor for the International Journal of Circuit Theory and Applications (Wiley), special issue "Secure lightweight crypto-hardware" Vol. 45, 2, Feb. 2017 (Oct. 2015 - Oct. 2016).
- Guest Editor for the Sensors Journal (MDPI), special issue "Sensors and Sensing Systems for Condition Monitoring" (ISSN 1424-8220).

Conference Chair or Technical Committee Member

- Technical Track Chair for the IEEE International Symposium on Circuits and Systems (ISCAS) 2020, Seville, Spain
- Technical Review Committee Member for the IEEE International Symposium on Circuits and Systems (ISCAS): 2019, Sapporo, Japan / 2022, Texas (USA), Austin / 2023, California (USA), Monterey
- Program Committee Member for the Association for Information and Communication Technologies ICT-ACT 2011 - ICT Innovations Conference 2011, Skopje, Macedonia

Conference Session Chair

- IEEE International Instrumentation and Measurement Technology Conference (I2MTC) - Years: 2012
- IEEE International Symposium on Circuits and Systems (ISCAS) - Years: 2019, 2020-21, 2023

International Journal Reviewer

- IEEE Transactions on Circuits and Systems I
- IEEE Transactions on Circuits and Systems II
- IEEE Open Journal of Circuits and Systems
- IEEE Transactions on VLSI
- IEEE Transaction on Cybernetics
- International Journal of Circuit Theory and Applications (Wiley)
- International Journal of Bifurcation and Chaos (World Scientific)
- Mathematical Problems in Engineering (Hindawi)
- Journal of Systems and Software (Elsevier)

- International Journal of Industrial Electronics and Drives (Inderscience)
- Sensors (MDPI)

Education

University of Siena

2006 / PhD

He received his PhD in Information Engineering (*Ingegneria dell'Informazione*) from the University of Siena.

2003 / Laurea

He graduated in Electronics and Communications Engineering (*Laurea in Ingegneria delle Telecomunicazioni, 5 years*) from the University of Siena, Italy.

Past Positions

University of Siena

1st Nov. 2016 - 30th Oct. 2019 - Assistant Professor of Electronics

1st Aug. 2014 - 30th Oct. 2016 - Technical Laboratory Assistant

1st Feb. 2014 - 31st Jul. 2014 - Research Scholarships

15th Jan. 2013 - 14th Jan. 2014 - Research Associate in Electronics

1st Nov. 2010 - 31st Oct. 2012 - PostDoc Research Scholarship

1st Oct. 2006 - 20th Sep. 2010 - Research Associate in Electronics

1st Oct. 2003 - 30th Sep. 2006 - PhD Program

University of California San Diego (UCSD), USA

1st Feb. 2005 - 31st Jul. 2005 - Visiting Scholar at the Institute for Nonlinear Science, hosting Professor Ljupco Kocarev.

Teaching Activities

University of Siena

Since Nov. 2019, as Associate Professor, he has been teaching the *Analog Circuit Design* and *Digital Embedded Electronics for Smart Industry* courses for the Master's Degree program in Electronics and Communication Engineering.

Between Nov. 2003 and Oct. 2016 he was involved yearly in several teaching activities for the Bachelor and Master's Degree programs in Electronics and Communication Engineering, specifically for the following courses: *Electronics, Applied Electronics Laboratory, Electronic Circuit Design, Analog Circuit Design*.

Between Nov. 2016 and Oct. 2019, as an Assistant Professor, he taught

the course *Industrial Measurements and Digital Embedded Electronics* for the Master's Degree program in Electronics and Communication Engineering.

University Governance

University of Siena

Since Jan. 2022 he is Chair of the Electronics and Communications Engineering M. Sc. Program, University of Siena.

Since Jan. 2023 he is member of the Committee for International Teaching Programs at the University of Siena

Since Nov. 2019 he has been a member of both the Students Guidance Committee (Commissione Orientamento) and the Didactic Committee (Comitato per la Didattica) for the Master's Degree Program in Electronics and Communication Engineering of the Department of Information Engineering and Mathematics, University of Siena.

Since Nov. 2016 he has been a member of the Department Council, in the same Department.

Technology Transfer

Spin Offs

In 2019 he co-founded the University of Siena's Spin-Off SferaTech Srl (<http://www.sfera-tech.com/>). The company focuses on the design and development of electronic systems and sensors for industrial applications, including security and reliability analyses.

Research Agreements

Since 2017 he has been the Scientific Director of different Research Agreements with Infineon Technologies Italia S.r.l., for an overall funding budget of 247.000 EUR + VAT. Infineon Technologies AG is the largest German semiconductor manufacturer.

Since 2015 he has been involved in different joint research activities with General Electrics (Baker Hughes).

Personal Information

He was born in Siena, Italy, on May, 2nd 1973. He is married to Sonia and he has one son, Alessandro. His brother, Matteo, ranks among the top 10 Italian Jazz Hammond Organ players, according to the Jazz-It magazine.