

PERSONAL INFORMATION

Ferdinando Chiacchio

Email: ferdinando.chiacchio@unict.it

Birth: 03/28/1981

Address: Via Cubisia 37, Aci Catena, 95022 (CT), Italy

Mobile: +39/3287171803

EDUCATION

- 2011 **PhD (XXIII Cycle) in Mathematics Applied to Engineering**
University of Catania, Department of Mathematics and Computer Science
- 2010 **Visiting PhD Candidate, Duke High Availability Assurance Laboratory (DHAAL)**
Duke University, Department of Electrical Engineering, North Carolina (US)
- 2005 **MSc Computer Engineering (110/110 Cum laude)**
University of Catania, School of Computer Engineering
- 2004 **Visiting Student (MSc Thesis)**
Bielefeld University - Department of Biological Cybernetics, Faculty of Biology
- 2004 **Erasmus Student (during the MSc Degree)**
Leeds University, School of Computer Science & Department of Mechanical Engineering

RESEARCH POSITIONS

- 2018 **Associate Researcher**
University of Catania, Department of Electrical, Electronic and Computer Engineering
- 2015- 2016 **PostDoc ING-IND/17**
University of Catania, Department of Industrial Engineering
- 2012- 2013 **PostDoc ING-INF/05**
University of Catania, Department of Electric Electronic & Computer Engineering

RESEARCH ACTIVITIES

- Conception of mathematical and simulation models for the reliability assessment of complex systems
- Analysis and optimization of Supply-Chain and behavioral decision making (BOM)
- Implementation of RFID technology in industrial processes for tracking and traceability
- Processes analyses aiming the corporate reorganization (definition of the requirements of integrated information systems, such as MES, ERP)
- Study and implementation of the enabling technologies for Industry 4.0 (RFID, Blockchain, IoT protocols).

TEACHING

- A.A. 2018 – 2019 **Design and management of industrial plants (90 hours)**
Degree course – Industrial and Mechanical Engineering
- A.A. 2016 – 2018 **Reliability Modelling (8 hours)**
School of International Doctorate, University of Catania (Basic & Applied Biomedical Sciences)
- A.A. 2015 – 2016 **Design and management of industrial plants (30 hours)**
Degree course – Industrial and Mechanical Engineering
- A.A. 2011 – 2012 **Introduction to Informatics (24 hours)**
University of Messina, Faculty of Pharmacy
- A.A. 2011 – 2012 **Introduction to Informatics (40 hours)**
University of Catania, Scuola Superiore di Eccellenza di Catania

PROFESSIONAL JOBS

- 10/2017 – 09/2018 **Innovation ICT Manager**
SIFI SPA, Via Ercole Patti 36, 95025, Aci Sant'Antonio (CT)
Sector Pharmaceutical Industry
- 05/2014 – 09/2017 **Application Engineer Manager**
Bax Energy Srl, Via Trinacria 32/34, 95030, Tremestieri Etneo (CT)
Sector Industry, Information Technology
- 05/2013 – 04/2014 **Software Design Engineer**
ASML, De Run 6501, 5504 DR Veldhoven, Netherlands
Sector Industry, Information Technology
- 03/2011 – 07/2012 **Project Engineer**
EuSService SRL, Via Marchese di San Giuliano 142, 95024, Acireale(CT)
Sector Industry and Services
- 09/2005 – 12/2006 **Software Engineer**
IWBANK SPA, Via Cavriana 20 Milano
Sector Information Technology

RECENT PUBLICATIONS (Last 3 years)

- 1) Chiacchio F, D'Urso D, Compagno L, Chiarenza M, Velardita L. Towards a Blockchain Based Traceability Process: A Case Study from Pharma Industry. In: Ameri F., Stecke K., von Cieminski G., Kiritsis D. (eds) *Advances in Production Management Systems. Production Management for the Factory of the Future. APMS 2019. IFIP Advances in Information and Communication Technology*, vol 566. Springer.
- 2) Chiacchio F, D'Urso D, Famoso F, Brusca S, Aizpurua JI, Catterson VM. On the use of dynamic reliability for an accurate modelling of renewable power plants. *Energy*, 151, 605-621, 2018 (10.1016/j.energy.2018.03.101).
- 3) D'Urso, F Chiacchio, C Di Mauro. Group decision making in Newsvendor game: a pilot human experiment *IFAC-PapersOnLine* 51 (11), 2018, 1523-1527.
- 4) Chiacchio F, Aizpurua, J.I, D'Urso D, Compagno L (2018). Coherence region of the Priority-AND gate: Analytical and numerical examples. *Quality and Reliability Engineering International*, vol. 34, p 107-115, ISSN:0748-8017.
- 5) Aizpurua, J.I, Catterson, V.M., Papadopoulos Y, Chiacchio F, D'Urso D, (2017). Supporting group maintenance through prognostic-enhanced dynamic dependability prediction. *Reliability Engineering and System Safety*, vol. 168, p171-188, ISSN 0951-8320.
- 6) Aizpurua, J.I, Papadopoulos Y, Muxika E, Chiacchio F, Manno, G. (2017). On cost-effective reuse of Components in the Design of Complex Reconfigurable Systems. *Quality and Reliability Engineering International. Computers and Industrial Engineering*, vol. 37, 1387-1406, ISSN 0748-8017.
- 7) D'Urso D, Di Mauro C, Chiacchio F, Compagno L (2017). A behavioural analysis of the newsvendor game: Anchoring and adjustment with and without demand information. *Computers and Industrial Engineering*, vol. 111, p 552-562, ISSN 0360-8352.
- 8) Aizpurua, J.I, Catterson, V.M., Papadopoulos Y, Chiacchio F, Manno G. (2017). Improved Dynamic Dependability Assessment through Integration with Prognostics. *IEEE Transaction on Reliability*, vol. 66, 7924411, p. 893-913, ISSN 0018-9529.
- 9) Chiacchio F, D'Urso D, Manno G, Compagno L (2016). Stochastic hybrid automaton model of a multi-state system with aging: Reliability assessment and design consequences. *Reliability Engineering & System Safety*, vol. 149, p. 1-13, ISSN: 0951-8320.
- 10) Chiacchio F, D'Urso D, Compagno L, Pennisi M, Pappalardo F, Manno G (2016). SHyFTA, a Stochastic Hybrid Fault Tree Automaton for the modelling and simulation of dynamic reliability problems. *Expert Systems With Applications*, vol. 47, p. 42-57, ISSN: 0957-4174.
- 11) D'Urso, C Di Mauro, F Chiacchio, L Compagno. Modelling Human Behaviour in Newsvendor Game. *IFAC-PapersOnLine* 48 (3), 2015, 610-615.