

## PERSONAL INFORMATION



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https://fcrlab.unime.it/people
https://www.linkedin.com/in/faziomaria/
Date of birth 17 July 1976 | Nationality Italian

WORKING EXPERIENCE	
December 2020 - Present	

Assistant Professor Università degli Studi di Messina SSD: Inf/01-Informatica

# December 2019 - Present Member of the PhD course in Bioengineering Applied to Medical Sciences

Università degli Studi di Messina

The PhD course joins professors working on both the technological and biomedical sectors in order to train young researchers who can act as a bridge between the two areas. The College involves researchers from Italian and foreign research bodies and companies operating in the biomedical sector.

December 2018 - December 2020 Research Associate

Università degli Studi di Messina

SSD: Inf/01-Informatica

The position was cofunded by the Institute of Hospitality and Care in Character Scientific (IR-CCS) Bonino Pulejo of Messina, under the Agreement between the Università degli Studi di Messina and IRCCS for joint activities on: Cloud Services for Workflow Automation Medical care in the remote assistance of patients with pathologies.

#### February 2017 - November 2019 Spin-Off co-founder

Academic Spin-Off at University of Messina named "Alma Digit"

Alma Digit is a fully Constituted, S.R.L-Company

The Spin-Off aims at creating a Cloud Platform for Implementation and automation of processes. Role: Scientific Responsible and Driver of ICT Innovations.

February 1, 2016 - October 31, 2016

## Research Grant

University of Messina, Italy

Research Grant supported by the EU FP7 CloudWave: Agile Service Engineering for the Future Internet. 2013-16.

Design and development of software components and prototypes for cloud services working on virtual infrastructures and exploiting agile development mechanisms for reliable services.

## October 1, 2012 - October 31, 2014 Assistant Researcher

University of Messina, Italy



Research assistant position supported by project S.I.Mon.E. (Integrated system for monitoring energy production in smart grids), PO FESR Sicilia 2007-2013, DICIEAMA Department at the University of Messina.

Design and development of a Cloud-based solution to collect, store and process data coming from energy monitoring environment.

### February 10 - November 09, 2011 Assistant Researcher

University of Messina, Italy

Research assistant position supported by project PRIN 2008, Department of Mathematics of the University of Messina.

Working on "Studio e sviluppo di architetture ed algoritmi per infrastrutture Cloud a contribuzione volontaria" (Design and development of architectures and algorithms for voluntary contribution in Cloud infrastructures).

Design and development of an algorithm for resource management in the Cloud@Home infrastructure.

#### March 1, 2009 - February 28, 2010 Assistant Researcher

University of Messina, Italy

Research assistant position supported by project PRIN 2007, Department of Mathematics of the University of Messina.

Working on algorithms for QoS in sensor networks.

#### May 11, 2006 - February 29, 2008 Post-doc fellowship

University of Messina, Italy

Post-doc fellowship in Advanced Technologies for Information Engineering. Working on middleware services for wireless ad hoc networks.

#### May 01 - December 31, 2015 Fixed-term contract

SESA NV S.r.I., via Cristoforo Colombo n.112, 00147, Roma, Italy Fixed-term contract within the research project STIGAFF. Design and Implementation of ICT solutions for an advanced management of banking services through multi-channel transactional systems.

## May 01 - September 30, 2015 Fixed-term contract

University of Messina, Italy

Fixed-term contract within the national research project S.I.Mon.E. (Integrated system for monitoring energy production in smart grids).

Test and reorganization of the S.I.Mon.E. middleware for managing cloud-oriented applications with security requirements.

March 01 - October 31, 2008 Fixed-term contract

Consorzio COMETA, University of Catania, Italy

Fixed-term contract within the national research project *PI2S2*, stipulated with Consorzio COMETA, University of Catania, via S. Sofia 6, 95123, Italy.

Development of procedures necessary for the efficient management of the GRIDSPN communication subsystem.

March 15 - April 14, 2006 Fixed-term contract

University of Messina, Italy



Fixed-term contract within the national research project *TriGrid VL*, stipulated with the Department of Mathematics of the University of Messina, Italy.

Working on the development of procedures necessary for the efficient management of the GRIDSPN communication subsystem.

#### December 1 - 31, 2005 Fixed-term contract

University of Messina, Italy

Fixed-term contract within the national research project *FIRB-Perf* (Performance Evaluation of Complex Systems-Techniques, Methodologies and Tools), stipulated with the Department of Mathematics of the University of Messina, Italy.

Working on the implementation of simulative performance models for wireless networks.

#### 2003 - 2006 Assistant

University of Messina, Italy Assistant in Computer science (S.S.D. ING-INF/05) at the Faculty of Engineering.

Academic years: 2021/2022 Advanced Algorithms And Computational Models - Mod. B (6 CFU, SSD INF/01) Master Degree course in Engineering and Computer science

University of Messina, Italy

#### Academic years: 2021/2022 Programming (9 CFU, SSD INF/01)

Undergraduate course in Computer science University of Messina, Italy

Academic years: 2021/2022 Virtua

## Virtualization Systems (Operating Systems - Module B) (6 CFU, SSD INF/01)) Undergraduate course in Computer science

University of Messina, Italy

Academic years: 2020/2021 Programming (9 CFU, SSD INF/01)

Undergraduate course in Computer science University of Messina, Italy

## Academic years: 2020/2021 Operating Systems (Module B) (6 CFU, SSD INF/01))

Undergraduate course in Computer science University of Messina, Italy

Academic years: 2019/2020 Informatics for finance

Undergraduate course in Bank and finance University of Messina, Italy

Academic years: 2019/2020 Database Undergraduate course in Electronic and Informatics Engineerig University of Messina, Italy

Academic years: 2018/2019 and 2019/2020

Operating Systems (Module B)



Undergraduate course in Computer science University of Messina, Italy

Academic years: 2014/2015 and 2015/2016

## Fundamentals of Informatics (Module A)

Undergraduate course in Electronic and Informatics Engineering University of Messina, Italy

Academic years: 2014/2015 Computer skills Undergraduate course

University of Messina, Italy Teacher at the Faculty of Pharmacy, University of Messina.

## Academic year: 2011/12 Computer networks

Postgraduate course University of Messina, Italy Second level master degree program on "Open source and informatics security", DICIEAMA Department, University of Messina.

## Academic year: 2010/11 Web oriented programming and security

Postgraduate course

University of Messina, Italy Second level master degree program on "Open source and informatics security", Biology Department, University of Messina.

Academic year: 2010/11 Computer networks Postgraduate course University of Messina, Italy

Second level master degree program on "Open source and informatics security", Biology Department, University of Messina.

#### Academic year: 2010/11 Interfaces between logistic systems and characteristic processes

Postgraduate course

University of Messina, Italy

Second level master degree program on "ICT to support sustainable mobility in healthcare", SEFISAST Department, University of Messina.

Academic year: 2010/2011 Elaboration systems (module A) Undergraduate course in Electronic and Informatics Engineering University of Messina, Italy Teacher at the Faculty of Engineering, University of Messina.

Academic years: 2007/2008, Fundamentals of Informatics 2008/2009 e 2009/2010

Undergraduate course in Engineering University of Messina, Italy Teacher at the Faculty of Engineering, University of Messina.



Academic year: 2007/08	Computer networks
	Postgraduate course
	University of Messina, Italy Second level master degree program on "Open source and informatics security", Biology De-
	partment, University of Messina.
Thesis co-advisor	2003-2016
	University of Messina, Italy
	Co-advisor of many undergraduate and graduate students at the Faculty of Engineering, University of Messina.
EDUCATION AND TRAINING	areer as Associate Professor in Computer Science.
April 2017	National Habilitation for Academic Career as Associate Professor
	Area: 01/B1 - Informatica
January 2006	PhD degree
	University of Messina, Italy
	PhD in Advanced Technologies for Information Engineering
	Thesis Title: Autoconfiguration and Reliable Communication Support in Mobile Ad Hoc Networks.
March 8 - September 7, 2005	Visiting experience
	University of California, Los Angeles
	Working as Intern in the Laboratory of Prof. Mario Gerla, the NRL (Network Research Lab).
	Research activity on ad hoc network addressing schemes with reference to VANET (Vehicular Ad hoc NETwork) environments.
July 2002	
	University of Messina, Italy
	TGraduation mark: Summa cum laude
	TThesis Title: Tecnologie wireless per reti Ad Hoc mobili (Wireless technologies for mobile ad hoc networks).
EDITORIAL ACTIVITIES	
2021-today	Editorial Review Board member/Associate Editor
	International Journal
	Journal: Scientific Reports - Computational Science
	Publisher: Nature Publishing Group ISSN: 2045-2322
	Journal in Q1-SCOPUS in the Subject Category Multidisciplinary
	Journal in Q1-WoS in the Subject Category Multidisciplinary Science
2021-today	Editorial Review Board member/Associate Editor
	International Journal
	Journal: Computing
	Publisher: Springer-Verlag Wien
	ISSN: 0010-485X



Journal in Q2-SCOPUS in the Subject Category Computer Science: Software Journal in Q2-WoS in the Subject Category Computer Science, Theory Method

#### 2016-today Editorial Review Board member/Academic Editor

International Journal Journal:Wireless Communications and Mobile Computing Publisher: John Wiley Sons and Hindawi ISSN: 2410-6895

## 2015-today Editorial Review Board member/Associate Editor

International Journal Journal: EAI Endorsed Transactions on Smart Cities Publisher: European Alliance for Innovation (EAI) ISSN: 2518-3893

#### 2012-today Editorial Review Board member

International Journal Journal: Journal of Business Data Communications and Networking (IJBDCN) Publisher: IGI Publishing. ISSN: 1548-0631

## 2018 Guest Editor

Special Issue on International Journal Special Issue title: Convergence of IoT, Edge, and Cloud Computing in Smart Cities. Journal: IEEE Cloud Computing. Publisher: IEEE Computer Society. volume: Volume: 5, Issue: 5.

#### 2016-2017 Co-Editor in Chief

Internation Journal Journal: EAI Endorsed Transactions on Cloud Systems. Publisher: EAI - European Alliance for Innovation.

#### 2016 Guest Editor

Special Issue on International Journal Special Issue title: Special Issue on Advances in Cloud for Smart Cities. Journal: International Journal of Distributed Systems and Technologies (IJDST). Publisher: IGI Global. Volume: Vol. 7, No. 1

### 2013 Guest Editor

Special Issue on International Journal Special Issue title: Cloud for Internet of Things. Journal: Scalable Computing: Practice and Experience. Publisher: West University of Timisoara, Romania. volume: Volume 14, Issue 4.



#### Reviewer 2004-today

#### International Journal

- ACM Transactions on Autonomous and Adaptive Systems (ACM).
- IEEE Transactions on Parallel and Distributed Systems (TPDS), IEEE Computer Society.
- Computer Network (ComNet), Elsevier.
- Ad Hoc Networks, Elsevier.
- Pervasive and Mobile Computing, Elsevier.
- IEEE Communication Letters, IEEE Communication Society.
- Ad Hoc & Sensor Wireless Networks (AHSWN), OCP Science.
- Mobile Networks and Applications, SpringerLink.
- International Journal of Web and Grid Services, Inderscience Publisher.
- Journal on Advances in Signal Processing (EURASIP), Hindawi Publishing Corporation.
- Journal of Zhejiang University SCIENCE (JZUS).
- Neural Network World, Czech Technical University in Prague.

#### INVITED PRESENTATIONS AND PANELS

### 3 December 2019 Invited Speaker

Europen Commission, Investment in High-Capacity Net- works (Unit B.5), Brussels, Belgium Event: B-Day: Boosting Connectivity Investments,

Panel 3: "Making sense of connectivity"

12 October 2019

## Invited Speaker

Google development Group - Nebrodi, Sant'Agata di Militello, Messina, Italy Event: DevFest Mediterranean

Topic: Introductory keynote on Blockchain and Cryptocurrencies.

#### 9 October 2019 Invited Speaker

Politecnico di Milano, Milano, Italy

Event: Quando il Cloud é troppo lontano Dall'IoT alle applicazioni di Intelligenza Artificiale (When the Cloud is too far from IoT to artificial intelligence applications) Topic: How Osmotic Computing is changing the deployment of Edge services.

#### 27 June 2016 Invited Speaker

15th International Workshop on Digital Entertainment, Networked Virtual Environments, and Creative Technology (DENVECT'16)

Messina, Italy

Topic: Cloud and Edge Computing for Interactive Media and Digital Entertainment.

#### 15 September 2015 Invited Speaker

Speaker at the Panel "Migrating to Cloud and IoT Solutions: Challenges and Perspectives". In conjucttion with Workshops of ESOCC 2015.

Other speakers of the Panel: Pooyan Jamshidi (Imperial College London, U.K. & IC4, Ireland), Orazio Tormachio (University of Catania, Italy), Luiz Angelo Steffenel (Universit de Reims Champagne-Ardenne, France).

#### **EVENT ORGANIZATION ACTIVITIES**

30 June 2019

#### Publication Chair

International conference Barcellona, Spagna.



9th Workshop on Management of Cloud and Smart City Systems (MoCS 2019). Web site: https://mocs19.gforge.uni.lu/committee.html

## 16 May 2019 Publication Chair

International conference Larnaca, Cipro; 3rd IEEE International Conference on Fog and Edge Computing (ICFEC 2019). Web site: http://www.cloudbus.org/fog/icfec2019/organization.html

#### 11 May 2020 Organizer

International workshop Bilbao, Spagna Workshop on Secure IoT, Edge and Cloud systems (SIoTEC 2020) Web site: http://siotec2020.netsons.org/

#### 22 October 2019 Organizer

International workshop Melbourne, Victoria, Australia First Workshop on Cyber-Physical Social Systems (CPSS 2019) Web site: https://cpss.netsons.org/

#### 14-16 September, 2016 Publication Chair

International conference Brindisi, Italy Conference title: 2nd EAI International Conference on Cloud Computing, Networking for IoT systems (CN4IoT 2016). Web site: http://cloudniot.org/2016

#### September 5, 2016 Organizer

International workshop Vienna, Austria Workshop title: 4th International Workshop on Cloud for IoT (CLIoT 2016). Web site: http://sites.google.com/site/cliot2016workshopaustria Note: the workshop has been organized in conjunction with the European Conference on Service-Oriented and Cloud Computing (ESOCC 2016).

### 27-30 June, 2016 Workshop Chair

International conference Messina, Italy Conference title: The twenty first IEEE Symposium on Computers and Communications (ISCC 2016). Web site: http://iscc2016.unime.it/

## 26-27 October, 2015 Publication Chair

International conference Rome, Italy Conference title: International Conference on Cloud Computing, Networking for IoT systems (CN4IoT 2015).



Web site: http://cloudniot.org/2015

## September 15-17, 2015 Local organization committee member International conference Taormina, Italy Conference title: Fourth European Conference on Service-Oriented and Cloud Computing (ES-OCC 2015). Web site: http://esocc2015.unime.it/

#### September 15, 2015 Organizer

International workshop

Taormina, Italy

Workshop title: 3nd International Workshop on Cloud for IoT (CLIoT 2015).

Web site: https://sites.google.com/site/cliot2015/

Note: the workshop has been organized in conjunction with the European Conference on Service-Oriented and Cloud Computing (ESOCC 2015).

#### September 2, 2014 Organizer

International workshop

Manchester, United Kingdom

Workshop title: 2nd International Workshop on Cloud for IoT (CLIoT 2014).

Web site: https://sites.google.com/site/cliot2014/

Note: the workshop has been organized in conjunction with the European Conference on Service-Oriented and Cloud Computing (ESOCC 2014).

#### September 11, 2013 Organizer

International workshop

Malaga, Spain

Workshop title: Cloud for IoT (CLIoT 2013).

Web site: https://sites.google.com/site/cliot2013/

Note: the workshop has been organized in conjunction with the European Conference on Service-Oriented and Cloud Computing (ESOCC 2013).

#### March 10, 2011 Member of the organization committee

International workshop

Taormina, Italy

Workshop title: The Future of Cloud Computing: Strategies and Design.

Web site: http://reservoir.unime.it/workshop/

Note: the workshop has presented the main results achieved in the Resources and Services Virtualization without Barriers (RESERVOIR), European Union FP7 funded project.

#### July 20, 2006 Organizer

Public Lecture

University of Messina, Italy

Speaker: Prof. Giuseppe Anastasi, Associate Professor of Computer Engineering at the Department of Information Engineering of the University of Pisa, Italy.

Lecture title: Energy-efficient Data Collection in Wireless Sensor Networks.

Address: Faculty of Engineering, University of Messina, Italy.



#### December 14, 2005 Organizer

Public Lecture

University of Messina, Italy

Dr. Daniela Maniezzo, Assistant Professor at the University of California, Los Angeles, USA. Lecture title: em IEEE 802.11s Mesh Networks.

Address: Faculty of Engineering, University of Messina, Italy.

#### FUNDING AND AWARDS

#### May 2019 Funding

Funding for Basic University Research Activities (FFABR Unime)

Object of the funding: the FFABR Unime program aims to assign funding to each associate professor or researcher according to the order of the ranking drawn up on the basis of the individual scientific production of each proposer of the last five years.

#### December 2018 Award

Winner of the "Discover Open Data Challenge" award, FIWARE ICT Challenge Vienna with Alma Digit s.r.l.

The winners realized their concept in a Challenge Partner project and won prize money totaling 10,000 Euros.

#### December 2018 Recognition

The paper "An IoT Cloud System for Traffic Monitoring and Vehicular Accidents prevention Based on Mobile Sensor Data Processing" is recognized as one of the top 50 most frequently accessed documents in November 2018 by IEEE Sensors Journal

#### October 2014 Award

Special award for the innovation project "itineranda", Start Cup Unime competition University of Messina, Italy.

## NATIONAL AND INTERNATIONAL PROJECTS

She has been involved in the activities of many projects, such as:



- H2020 URBANITE Supporting the decision-making in URBAN transformation with the use of dIsruptive TEchnologies, 2020-2023.
- TALISMAn: Tecnologie di Assistenza personALizzata per il Miglioramento della quAlitá della vitA, PON "Ricerca e Innovazione" 2014 - 2020, Area di Specializzazione: Tecnologie per gli Ambienti di Vita, Grant ARS01\_01116.
- GOFORIT L'Esperienza prima della partenza, PON "Ricerca e Innovazione" 2014 à 2020, Area di Specializzazione: Cultural Heritage, Grant ARS\_0100865.
- C4E: Federated Certified Service Brokerage (FCSB), EU FP7-Cloud for Europe: Realization of a research and development project (pre-commercial procurement) on Cloud for Europe, LOT 1, Number 5843932.
- C4E: Secure, Legislation Aware Storage (SLAS), EU FP7-Cloud for Europe: Reali- zation of a research and development project (pre-commercial procurement) on Cloud for Europe, LOT 2, Number 5843932. - September 2015-November 2016.
- H2020 BEACON Enabling Federated Cloud Networking 2015.
- EU FP7 CloudWave: Agile Service Engineering for the Future Internet 2013.
- Italian PON SIGMA: Sistema Integrato di sensori in ambiente cloud per la Gestione Multirischio Avanzata - 2013.
- Italian POR FESR SIMONE Sistema Integrato per il MONitoraggio della produzione di Energia Elettrica - 2013.
- EU FP7 Project VISION CLOUD 2010.
- Italian Project PRIN Cloud@Home 2010.
- EU FP7 Project RESERVOIR Resources and Services Virtualization without Barriers -2008.
- Italian project PI2S2: Progetto per la Implementazione e lo Sviluppo di una e-Infrastrutura in Sicilia basata sul paradigma della Grid - 2007.
- Italian TriGrid VL: Trinacria Grid Virtual Laboratory 2006.
- Italian Project CNR Software Infrastructures for ad hoc networks in complex environments -2002.
- Italian Project FIRB WebMinds: Middleware for advanced services in wired-wireless distributed systems of huge dimensions - 2002.

#### ACADEMY AND SCIENTIFICE MEMBERSHIP

2019-today

#### ay Membership

Member of GRIN (National Group of Informatics) Web site: www.grin-informatica.it

#### 2016-today Membership

Member of the Istituto Nazionale di Alta Matematica "Francesco Severi" Web site:https://www.altamatematica.it/

#### 2015-today Membership

IEEE Computer Society Technical Community on Parallel Processing (TCPP) Member of the IEEE Computer Society Technical Community on Parallel Processing (TCPP) Web site: http://tcpp.computer.org

#### 2014-today Membership

IEEE Internet of Things (IoT) Member of the IEEE Internet of Things (IoT) Technical Community. Web site: http://http://iot.ieee.org/

#### 2007-today Technical Program Committee Membership

International conferences and workshops



Member of the Technical Program Committee of several international conferences and workshops, such as: IADIS Telecommunications, Networks And Systems (TNS), International Workshop on Ubiquitous Multimedia Systems and Applications (UMSA), IEEE International Congress on Ultra Modern Telecommunications and Control Systems (ICUMT), IEEE-IFIP Wireless Days (WD), International Conference On Sensing Technology (ICST), International Conference on Emerging Ubiquitous Systems and Pervasive Networks (EUSPN), International Conference on the Future Internet of Things and Cloud (FiCloud), International Multi-Conference on Computing in the Global Information Technology (ICCGI), Workshop on Management of Cloud Systems (MoCS), International Workshop on Sensors and Smart Cities (SCC), International Workshop on Emerging Multimedia Applications and Services for Smart Cities (EMASC), Workshop on the management of resources and services in Cloud and Sky computing (MICAS), IADIS International Conference on Connected Smart Cities (CSC), International Conference on Theory and Practice in Modern and Computing (TPMC).

INSTITUTIONAL RESPONSIBILITIES	
March 2021-today	Node Director
	Node Director for the University of Messina in CINI National Laboratory "HPC: Key Technolo- gies and Tools" (HPC-KTT). The HPC-KTT laboratory focuses on models and tools for High Performance Computing. https://www.consorzio-cini.it/index.php/it/home-hpc University of Messina
October 2019-today	Scientific Responsible
	Scientific Responsible of the research activities defined in the agreement between the Univer- sity of Messina, the Istituto Superiode di Sanità and the Institute for Biomedical Research and Innovation (IRIB) - CNR as part of the Project "Shaping the social brain through early interac- tions - SAPIENS", admitted for funding from European Union funds Horizon 2020 under the Marie Skłodowska-Curie Actions - Innovative Training Networks Program n. 814302. University of Messina
April 2021-January 2022	Scientific Supervisor
, po oa	Scientific Supervisor of the UNESCO/Keizo Obuchi Research Fellowship to undertake research on "La Technologie d'Internet utilisée pour connecter une communauté Rural à un Cloud". University of Messina
May 2020-today	Vice head of Bachelor Program
	Vice head of the Bachelor Program in Computer Science
	Dipartimento di Scienze Matematiche e Informatiche, Scienze Fisiche e Scienze della Terra (MIFT)
	University of Messina
Novemeber 2019-today	Technical Referent
	Technical Referent for the University of Messina in the TALISMAn project
	TALISMAn: Tecnologie di Assistenza personALizzata per il Miglioramento della quAlità della vitA, PON Ricerca e Innovazione 2014 - 2020, Area di Specializzazione: Tecnologie per gli Ambienti di Vita, Grant ARS01_01116.
Novemeber 2019-today	Ph.D supervising
	Referent for the supervision of a Ph.D student in "Biongineering applied to medical sciences"
	Ph.D fellowship funded by the Istituto Superiore di Sanità, within the action "SAPIENS: Shap- ing the social brain through early interactions" Marie SkLodowska-Curie Actions - Innovative Training Network



## May 2015-October 2016 Referent

Referent for the H2020 BEACON (Federated Cloud Networking- 2015/17) project within the Cluster of European Projects on Cloud NATRES (New approaches and technologies for the management of resources and cloud services).

Website: https://eucloudclusters.wordpress.com/new-approaches-for-infrastructure-services /



#### PUBLICATION

February 2022

## Bibliometric indicators (from Scopus)

The PI is author of more than 170 papers indexed in Scopus published in international conferences, workshops and journal.

- h-index: 23
- 132 Co-authors
- Total citations: 2084 by 1652 documents

#### List of publications in the field of healthcare in the last 5 years

- Ruggeri, A., Di Salvo, R., Fazio, M., Celesti, A., Villari, M. Blockchain-Based Strategy to Avoid Fake AI in eHealth Scenarios with Reinforcement Learning (2021) Proceedings - IEEE Symposium on Computers and Communications, 2021-September.
- Romano, A., Lanza, R., Celesti, F., Celesti, A., Fazio, M., Martella, F., Galletta, A., Villari, M. Towards Smart Tele-Biomedical Laboratory: Where We Are, Issues, and Future Challenges (2021) Proceedings - IEEE Symposium on Computers and Communications, 2021-September, .
- Koyazo, J.T., Ugwiri, M.A., Lay-Ekuakille, A., Fazio, M., Villari, M., Liguori, C. Collaborative systems for telemedicine diagnosis accuracy (2021) Acta IMEKO, 10 (3), pp. 192-197. https://www.scopus.com/inward/record.uri?eid=2-s2.0-8511905731
- Celesti, A., Celesti, F., Fazio, M., Villari, M. Improving Tele-Rehabilitation Therapy through Machine Learning with a NoSQL Graph DBMS Approach (2020) 2020 IEEE Globecom Workshops, GC Wkshps 2020 - Proceedings, art. no. 367392, .
- Salvo, R.D., Fazio, M., Celesti, A., Santoro, D., Villari, M. Mathematical Model and Al Oriented Analysis for Self-Regulated Learning in Remote Health Treatments (2020) 2020 IEEE Globecom Workshops, GC Wkshps 2020 - Proceedings, art. no. 367487, .
- Ruggeri, A., Fazio, M., Galletta, A., Celesti, A., Villari, M. A Decision Support System for Therapy Prescription in a Hospital Centre (2020) Proceedings - IEEE Symposium on Computers and Communications, 2020-July, art. no. 9219656, .
- Celesti, A., Celesti, F., Galletta, A., Fazio, M., Villari, M. Improving Machine Learning Algorithm Processing Time in Tele-Rehabilization through a NoSQL Graph Database Approach: A Preliminary Study (2020) Proceedings - IEEE Symposium on Computers and Communications, 2020-July, art. no. 9219700, .
- Fazio, M., Buzachis, A., Galletta, A., Celesti, A., Villari, M. A proximity-based indoor navigation system tackling the COVID-19 social distancing measures (2020) Proceedings - IEEE Symposium on Computers and Communications, 2020-July, art. no. 9219634, .
- Fiorillo, L., Cicciù, M., De Stefano, R., Bocchieri, S., Herford, A.S., Fazio, M., Cervino, G. Virtual reality and massive multiplayer online role-playing games as possible prophylaxis mathematical model: Focus on COVID-19 spreading (2020) Epidemiologic Methods, 9 (s1), art. no. 20200003, .
- Celesti, A., Ruggeri, A., Fazio, M., Galletta, A., Villari, M., Romano, A. Blockchain-based healthcare workflow for tele-medical laboratory in federated hospital IoT clouds (2020) Sensors (Switzerland), 20 (9), art. no. 2590, .
- Carnevale, L., Celesti, A., Fazio, M., Villari, M. A big data analytics approach for the development of advanced cardiology applications (2020) Information (Switzerland), 11 (2), art. no. 60, .
- Celesti, A., Lay-Ekuakille, A., Wan, J., Fazio, M., Celesti, F., Romano, A., Bramanti, P., Villari, M. Information management in IoT cloud-based tele-rehabilitation as a service for smart cities: Comparison of NoSQL approaches (2020) Measurement: Journal of the International Measurement Confederation, 151, art. no. 107218, .
- Galletta, A., Buzachis, A., Fazio, M., Celesti, A., Taheri, J., Villari, M. Smart hospitals enabled by edge computing (2020) Edge Computing, pp. 357-379.
- Ruggeri, A., Fazio, M., Celesti, A., Villari, M. Blockchain-Based Healthcare Workflows in Federated Hospital Clouds (2020) Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 12054 LNCS, pp. 113-121.
- Celesti, F., Celesti, A., Galletta, A., Fazio, M., Villari, M. Optimizing the Research of DNA Sequences in a NoSQL Document Database: A Preliminary Study (2019) Proceedings -IEEE Symposium on Computers and Communications, 2019-June, art. no. 8969697, .



- Buzachis, A., Celesti, A., Fazio, M., Villari, M. On the Design of a Blockchain-as-a-Service-Based Health Information Exchange (BaaS-HIE) System for Patient Monitoring (2019) Proceedings - IEEE Symposium on Computers and Communications, 2019-June, art. no. 8969718, .
- Celesti, A., Galletta, A., Celesti, F., Fazio, M., Villari, M. Using Machine Learning to Study Flu Vaccines Opinions of Twitter Users (2019) Proceedings - IEEE Symposium on Computers and Communications, 2019-June, art. no. 8969742, .
- Carnevale, L., Calabro, R.S., Celesti, A., Leo, A., Fazio, M., Bramanti, P., Villari, M. Toward improving robotic-assisted gait training: Can big data analysis help us? (2019) IEEE Internet of Things Journal, 6 (2), art. no. 8410669, pp. 1419-1426.
- Celesti, A., Fazio, M., Márquez, F.G., Glikson, A., Mauwa, H., Bagula, A., Celesti, F., Villari, M. How to develop IoT cloud e-health systems based on fiware: A lesson learnt (2019) Journal of Sensor and Actuator Networks, 8 (1), art. no. 7, .
- Galletta, A., Carnevale, L., Bramanti, A., Fazio, M. An Innovative Methodology for Big Data Visualization for Telemedicine (2019) IEEE Transactions on Industrial Informatics, 15 (1), art. no. 8370134, pp. 490-497.
- Celesti, A., Buzachis, A., Galletta, A., Fiumara, G., Fazio, M., Villari, M. Analysis of a NoSQL Graph DBMS for a Hospital Social Network (2018) Proceedings - IEEE Symposium on Computers and Communications, 2018-June, art. no. 8538469, pp. 1298-1303.
- Celesti, A., Fazio, M., Romano, A., Bramanti, A., Bramanti, P., Villari, M. An OAIS-based hospital information system on the cloud: Analysis of a NoSQL column-oriented approach (2018) IEEE Journal of Biomedical and Health Informatics, 22 (3), pp. 1-7.
- Carnevale, L., Galletta, A., Celesti, A., Fazio, M., Paone, M., Bramanti, P., Villari, M. Big data HIS of the IRCCS-ME future: The osmotic computing infrastructure (2018) Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, LNICST, 189, pp. 199-207.
- Vanelli, B., Pinto, A.R., da Silva, M.P., Dantas, M.A.R., Fazio, M., Celesti, A., Villari, M. IoT data storage in the cloud: A case study in human biometeorology (2018) Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, LNICST, 189, pp. 253-262.
- Carnevale, L., Celesti, A., Fazio, M., Bramanti, P., Villari, M. How to enable clinical workflows to integrate big healthcare data (2017) Proceedings - IEEE Symposium on Computers and Communications, art. no. 8024634, pp. 857-862.
- Galletta, A., Celesti, A., Tusa, F., Fazio, M., Bramanti, P., Villari, M. Big MRI data dissemination and retrieval in a multi-cloud hospital storage system (2017) ACM International Conference Proceeding Series, Part F128634, pp. 162-166.
- Celesti, A., Celesti, F., Fazio, M., Bramanti, P., Villari, M. Are Next-Generation Sequencing Tools Ready for the Cloud? (2017) Trends in Biotechnology, 35 (6), pp. 486-489.

#### 2003- Present Scientific collaborations

Collaborations proven by scientific joint publications with several international research groups in Academia and Industry : University of California in Los Angeles (USA), Indian Institute of Tecnologia a Guwahati (India), Indian Institute of Technology in Guwahati (India), Amirkabir University of Technology and Iran University of Science and Technology in Tehran (Iran), National Technical University in Athene (Grecia), University of Derby (UK), University of Manchester (UK), Università del Salento (Italy), Federal University of Santa Catarina (Brazil), Newcastle University (UK), Cardiff University (UK), Technische Universitat Wien (Austria), Telefonica (Spagna), IBM (Israele), IRCCS Centro Neurolesi Bonino Pulejo (Italy)Universidad de Alcala (Spain), South China University of Technology (China), University of Sydney (Australia), Universitatea de Vest din Timisoara (Romania), University of Amsterdam (Netherlands).

According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV

Messina, February 12th, 2022