

EUROPEAN
CURRICULUM VITAE
FORMAT



PERSONAL INFORMATION

Name

PROF. GIUSEPPE RUGGERI

Address

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Website

Nationality

Italian

Date of birth

02/12/1973

GENERAL RESEARCH INTERESTS

EDGE Computing, Software Defined Networks, Information Centric Networks, Internet of Things

BIBLIOMETRIC SUMMARY DATA

- Total international publications
- Total citations
- Total cited paper
- H-index

[84] source scholar.google.com
[1710] source scholar.google.com
[84] source scholar.google.com
[23] source scholar.google.com

EDUCATION AND TRAINING

- Dates (1998 – 2001)
- Name and type of organisation providing education and training
- Principal subjects/occupational skills covered
- Title of qualification awarded

Ph.D. in Computer Science, Communication and Electronic Engineering
University of Palermo

Electronic, Telecommunications, Computer science

Doctor of Philosophy in Computer Science, Communication and Electronic Engineering

- Dates (1998 – 2001)
- Name and type of organisation providing education and training
- Principal subjects/occupational skills covered
- Title of qualification awarded

Master Degree in Electronic Engineering
University of Catania

Electronic, Telecommunications, Computer science

Master degree in Electronic Engineering

PRINCIPAL POSITIONS

- Dates (2002 – today)
- Name and address of employer

Assistant Professor SSD ING-INF/03
University "Mediterranea" of Reggio Calabria
25, Via dell'Università, Reggio Calabria 89124,
www.unirc.it

- Type of business or sector
- Occupation or position held
- Main activities and responsibilities

Educational & Research

Assistant Professor

His main responsibilities concern the following aspects:

Teaching: During his career he teaches several courses such as Communication Basic, Communication Systems and Multimedia Internet

Research: His current interests include EDGE Computing, Software Defined Networks, Information Centric Networks, and Internet of Things.

TEACHING

- Current Communication Basics, Multimedia Internet
- Past Communication Systems, Computer Networks part II, Wireless Networks and Devices

GRANTS & PROJECTS

- Dates (2018 – 2021) Participant
- Name of the project A-WEAR “A network for dynamic wearable applications with privacy constraints”.
- Description H2020 MSCA-ITN/EJD. Member of the RU & Co-supervisor of an ESR.
- Total grant € 473.535 for the RU of the Univ. of Reggio Calabria.

- Dates (2018 – 2021) WP1 Leader and Local Coordinator at University “Mediterranea” of Reggio Calabria
- Name of the project ARS01_00836, “A COGnitive dynamic sysTem to allOw buildings to learn and adapt – COGITO”
- Description The project is focused on the integration of Internet of Things (IoT) with dynamic cognitive systems (SDC) with the aim of improving the management of public and residential buildings with cognitive and self-developed capabilities. The goal of the project is to combine IoT technology, cognitive computing, big data, machine learning and reasoning to help people live and work better in buildings, as well as maintain and manage the building itself by providing it with the capabilities to learn over time how to improve building management by acting in advance by performing programming, monitoring and control actions.
The main partners of the project are: genzia nazionale per le nuove tecnologie, l'energia e lo sviluppo economico sostenibile, ATERP Azienda Territoriale per l'Edilizia Residenziale Pubblica della Calabria, CUEIM Consorzio Universitario di Economia Industriale e Manageriale, Digimat S.r.l., DS TECH S.R.L., SCAI Lab S.r.l., SI-LAB CALABRIA SCARL, SITE S.p.A., SMARTS S.R.L. SPIN-OFF UNIRC, Telecom Italia SpA, Università degli Studi “Mediterranea” di REGGIO CALABRIA, Università degli Studi della BASILICATA, Università della CALABRIA
- Total grant Overall Budget € 8.585.926,68 - € 800.000 for the RU of the Univ. of Reggio Calabria.

- Dates (2018 – 2021) Participant
- Name of the project ARS01_00582, “Virtualizzazione, sensing e IoT per l'innovazione del processo produttivo industriale delle bevande”
- Description Principal Investigator: Prof. A. Iera.
Proponents: ARTEMAT S.R.L., CeRICT - Centro Regionale Information Communication Technology, CHROMALEONT S.R.L., Consorzio Nazionale Interuniversitario per le Telecomunicazioni (CNIT), SIRFIN SOCIETA' PER AZIONI, SMARTS S.R.L. SPIN-OFF UNIRC, Università degli Studi “Mediterranea” di REGGIO CALABRIA, WILD ORANGE S.R.L. IN SIGLA W.O. S.R.L.
- Total grant Overall Budget € 5.478.799,45.

- Dates (2018 – 2021) Participant
- Name of the project ARS01_01181, “Piattaforma Modulare Multi-Missione”
- Description Proponents: Distretto Tecnologico Aerospaziale della Campania - DAC S.c.a.r.l., Lombardia Aerospace Cluster – LAC, Università degli Studi “Mediterranea” di REGGIO CALABRIA, Università degli Studi di PADOVA

• Total grant	Overall Budget € 9.263.520,09.
• Dates (2018 – 2021)	Participant
• Name of the project	ARS01_01100, “MyPasS - La Mobilità per i passeggeri come Servizio”
• Description	Proponents: ALGOWATT S.p.A., ARST SPA, Corvallis S.r.l. a Socio Unico, ENGINEERING INGEGNERIA INFORMATICA SPA, EVOLVEA S.R.L., GREENSHARE SRL, Modis Consulting S.r.l., Municipia S.p.A., Università degli Studi “Mediterranea” di REGGIO CALABRIA, Università degli Studi di CAGLIARI
• Total grant	Overall Budget € 5.966.835,40
• Dates (2013 – 2017)	Local Coordinator at University “Mediterranea” of Reggio Calabria
• Name of the project	PON03PE_00050_1, “ Domus - Smart platform for monitoring and management of in-home security and safety of people and structures”
• Description	<p>The technological challenge that the project wants to face is the development of a social & pervasive technological platform allowing the integration of multi-sensors to enable security in the residential sector, through continuous control and monitoring of the welfare of residents and structures. The platform will exploit in an integrated fashion multiple information deriving from Body Area Networks measuring physiological parameters, from devices monitoring physical activity and from aids for disabled, all conform to proprietary, and usually incompatible with each other, communication standards. At the same time, a platform objective is the real-time monitoring of structures, which is implemented through the control and monitoring of phenomena based on the measurement of physical-mechanical parameters that describe the interaction between the environment and the state variables of structural object to be monitored.</p> <p>The main partners of the project are: University of Calabria, University “Mediterranea” of Reggio Calabria, CNR, Telecom Italia, SI-IES s.r.l.</p>
• Total grant	Overall Budget € 4.320.614,95 - € 1.074.000 for the RU of the Univ. of Reggio Calabria
• Dates (2013 – 2017)	Participant
• Name of the project	PON03PE_00050_2, “Domus- Cooperative Energy Brokerage Services”
• Description	<p>In the last few years, trough the opening towards the home users market for energy supply (electricity and gas), the liberalization process of the energy services provision has been completed, more slowly compared to other network services (cf. for example, fixed and mobile telephony) due to the public service nature of energy supply. The aim of the project is to resort to innovative interaction systems with the free market consisting of appropriate energy brokerage services for users' aggregations, to pursuit the rates reduction making full use of information and communication technologies to support intelligent networks (smart grids) as important tools to allow simultaneously:</p> <ul style="list-style-type: none"> - more rational use of energy and, consequently, transmission and distribution systems; - energy savings; - the renewable energy sources exploitation by the user who becomes a prosumer; - participation in the market by active demand management systems. <p>The main partners of the project are: University of Calabria, University “Mediterranea” of Reggio Calabria, CNR, Telecom Italia, SI-IES s.r.l.</p>
• Total grant	Overall Budget € 4.428.649,00 - € 587.738 for the RU of the Univ. of Reggio Calabria
• Dates (2013 – 2014)	Participant
• Name of the project	PON01_03096, “MC3 CARE- Integrated Platform to record, synchronize and share data a and access information on healthy, lifestyle and public health system from mobile”
• Description	The main partners of the project are: CNIT - Consorzio Nazionale Interuniversitario per le Tele comunicazioni.
• Total grant	€ 576.800
• Dates (2011 – 2016)	Participant
• Name of the project	PON01_00636, “Tecnologie e Materiali Anticontraffazione e Applicazioni Nanotecnologiche per l'Autenticazione e la tutela delle Produzioni Agro-Alimentari di Eccellenza - FINGERIMBALL”
• Description	FINGERIMBALL is a design concept that combines food profiling of excellence extrapolated primarily with omics technology and nanotechnology and aimed to create a Hight Quality Food

	identity card with the new ICTs. The main partners of the project are: UNIVERSITA' Mediterranea di Reggio Calabria, Università degli Studi di Messina, Università degli Studi di Salerno, API REGGINA società cooperativa agricola, EUROIDEE Srl, CNR - Consiglio nazionale delle ricerche, Dolciaria Monardo S.r.l., NATUREMED srl, PLANE S.R.L.
• Total grant	Overall Budget € 7.405.638,57 - € 3.061.384,28 for the RU of the Univ. of Reggio Calabria
• Dates (2011 – 2016)	Local Coordinator at University "Mediterranea" of Reggio Calabria
• Name of the project	PRIN 2009S7RLXY_002, "STEM-Net: "STEM" devices for self-organizing wireless Networks"
• Description	In the last years, the research world focused on networks constituted by elements able to: self-configure, self-adjust and self-organize. In the project STEM-Net the self-organization is managed at the level of a single wireless device, which is called "stem unit" because of its resemblance with its biological analogous. The "stemness" concept is analyzed and investigated through 4 main research directions: protocol reconfiguration, multi-homing, learning, cooperation/coordination. This unit's reconfiguration results in an extreme flexibility of the whole network segment, and it turns the nodes heterogeneity from a limitation to a richness. Principal Investigator: Prof. E. Viterbo Proponents: University of Calabria, University of Bologna, University "Mediterranea" of Reggio Calabria.
• Total grant	€ 95.258 for the RU of the Univ. of Reggio Calabria

SELECTED PUBLICATIONS AND RESEARCH REPORTS

(out of more than **75** publications)

- **G. Ruggeri**, M. Amadeo, C. Campolo, A. Molinaro and A. Iera, "*Caching Popular Transient IoT Contents in an SDN-based Edge Infrastructure*," in IEEE Transactions on Network and Service Management, 2021
- M. Amadeo, **G. Ruggeri**, C. Campolo, A. Molinaro, "*Diversity-improved caching of popular transient contents in Vehicular Named Data Networking, Computer Networks*", Volume 184, 2021, 107625.
- M. Amadeo, **G. Ruggeri**, C. Campolo, A. Molinaro, "*IoT services allocation at the edge via named data networking: From optimal bounds to practical design*," IEEE Transactions on Network and Service Management, 2019
- M. Amadeo, C. Campolo, **G. Ruggeri**, A. Molinaro "*Beyond Edge Caching: Freshness and Popularity Aware IoT Data Caching via NDN at Internet-Scale*," (2021) IEEE Transactions on Green Communications and Networking, DOI: 10.1109/TGCN.2021.3124452
- M. Amadeo, C. Campolo, **G. Ruggeri**, A. Molinaro, A. Iera, "*SDN-Managed Provisioning of Named Computing Services in Edge Infrastructures*," (2019) IEEE Transactions on Network and Service Management, 16 (4), art. no. 8856241, pp. 1464-1478. DOI: 10.1109/TNSM.2019.2945497

**PERSONAL SKILLS
AND COMPETENCES**

*Acquired in the course of life and career
but not necessarily covered by formal
certificates and diplomas.*

MOTHER TONGUE

ITALIAN

OTHER LANGUAGES

ENGLISH

- Reading skills
- Writing skills
- Verbal skills

GOOD
GOOD
GOOD

**SOCIAL SKILLS
AND COMPETENCES**

*Living and working with other people, in
multicultural environments, in positions
where communication is important and
situations where teamwork is essential.*

During his long career, Giuseppe Ruggeri has created acquaintances with fellow researchers all around the world, the resulting social network has proved to be very useful to build partnership to propose research project, organize workshop and to plan joint research activities.

In addition, Giuseppe Ruggeri serves as department delegate for prospective students guidance. Hence he frequently gives public speeches to high school students, produces short video clips for social media and, releases interviews to websites and local radios.

**ORGANISATIONAL SKILLS
AND COMPETENCES**

*Coordination and administration of
people, projects and budgets; at work, in
voluntary work.*

Giuseppe Ruggeri served as the coordinator of the local research teams at University "Mediterranea" involved in the projects "Stem-Net devices to build a Self-Generating access network", "Domus - Smart platform for monitoring and management of in-home security and safety of people and structures" and, "A COGNITIVE dynamic system to allow buildings to learn and adapt – COGITO". He also served as WP leader for COGITO project. Those responsibilities requested him (i) to coordinate and to supervise the work of the researchers involved in the local teams/work package, (ii) to coordinate with the partners' research teams, (iii) to monitor the advancement of the activities and to check their alignment with the overall project GANTT, (iv) to manage the budget assigned to the local teams/work package.

ADDITIONAL INFORMATION

Giuseppe Ruggeri is co-founder of SMARTS s.r.l. a spin-off of company of University of "Mediterranea" of Reggio Calabria.

Giuseppe Ruggeri served as TPC member of several leading international conferences and he was a member the organizing committee of several workshop. He has been guest-editor for IEEE Internet of Thing Journal and for Elsevier Ad Hoc Networks. Since 2017 he is serving as area editor of Elsevier Ad Hoc Networks, since 2019 he serving as managing editor of Springer Wireless Networks.

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.

Reggio Calabria, 7.4.2022

Name Surname

Signature