PE00000014 PE7
“PNRR MUR - M4C2 - SERICS - SEcurity and RIghts in the CyberSpace (SERICS)”

SPOKE N. 4

Research proposal
Securing Containers (SecCo)

SecCo-OC - Secure Containers Open Call

- Name of the PIs' host institution for the project
Università degli Studi di Messina

- Name of the Principal Investigators (PIs)
Antonio Puliafito

- Proposal duration in months:
16 Months
- Name and qualification of the Principal Investigator (PI)
- Name and qualification of the co-Principal Investigator (PI)
- Name and qualification of the components the research team

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<th>ROLE IN THE PROJECT</th>
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<th>INSTITUTION/DEPARTMENT</th>
<th>QUALIFICATION</th>
<th>(under 40 al 31.12.2023)</th>
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ABSTRACT

Containers are essential elements for developing applications based on the microservices paradigm. Evaluating their security is a complex challenge, especially in distributed and heterogeneous contexts. Additionally, developers should focus exclusively on integration and deployment processes, known as CI/CD (Continuous Integration/Continuous Development), not caring about the management of tasks aimed at ensuring that the developed microservice, and consequently the associated container, is sufficiently secure to avoid introducing vulnerabilities in the application, platform, or framework where it is implemented.

The SecCo-OC project aims to create an architecture capable of integrating within the CI/CD process, typical of the DevOps development paradigm, a series of workflows dedicated to the security of the container and the developed microservice. This involves static and dynamic threat analysis, their resolution, also by means of runtime enforcement, and the publication of the secure container in a dedicated repository.

SecCo-OC ensures the security of the microservice/container through various operational approaches. These include technological transition in containerization, enhancing container functionality through virtualization techniques and pass-through to specific hardware resources, and incorporating security services and policies directly within the container. This practice aims to balance security with functionality and flexibility, ensuring the adoption of a unified interface for the analysis and optimization of the container under consideration.

The architecture of SecCo-OC is designed to meet the requirements of scalability, flexibility, and reliability. This is achieved through the adoption of Cloud/Edge and I/O cloud-based solutions, enabling the extension of the DevOps paradigm to security even in environments related to pervasive computing.
RESEARCH PROPOSAL
Sections (a) and (b) should not exceed 4 pages. References do not count towards the page limits.
This project will answer to the specific requests of the open call, that represent specific Work packages of the SECCO-OC project, assigned to the partners as follow:

- WP1 [UniCampania, UniNapoli]: Building Secure-by-Design Containers
- WP2 [UniUD]: Behavioral Models of Containers and Security Policy Specification Language
- WP3 [UniTN]: Runtime Policies and Configuration Enforcement
- WP4 [UniME]: Design and Implementation of the SecCo Service

We clarify that all the results produced in the project will follow the principle of open science, most of the sw code will be delivered in open source, and the information, numbers or facts collected as part of the project can be modified, examined and shared by anyone for any reason.

The following is a detailed description of the different WPs of the SECCO-OC proposal.

WP 1 Building Secure-by-Design Containers
Section a. State-of-the-art and objectives
According to McGraw [1], security should be addressed early at the requirements level. Software requirements should include both functional and security requisites. Additionally, he suggested the usage of abuse cases to describe the system’s behavior under attack and to cover the security space. Russell et al. [2] identify most of the software security problems in the use of unsophisticated development techniques, the lack of security-focused quality assurance, and the limited training for software developers and project managers. Unicampania and Unina Teams worked on such a topic, proposing secdevops methodologies ([3,5]) and proposing a model aiming at outlining all the security activities needed to address the security during software development [5].

In such a context, the two teams will work on will address Task 1.2: Building Secure-by-Design Containers of the SecCo Project WP1, that will define the enabling methodologies and tools to build a Hardening module able to output a set of secured containers - ready to host a microservice application - that are compliant with security best practices and the requirements of the CI/CD team.

The hardening process includes the activities outlined in [5], like threat modeling and vulnerability assessment (VA), applied to the case of containers.

This task will involve the definition of the pipeline to support the hardening of general-purpose containers to meet the technical and security features of the application provided by the CI/CD team and security best practices.

According to the objectives outlined in the open call, we propose the following activities (in parenthesis the team that will address each activity):

- **A.1.1 Requirements (Unina):** Identification of a methodology to parse requirements provided by the CI/CD team, with a special focus on threat modeling;
- **A.1.2 Hardening Design (Unicampania):** Support the definition of a set of security tools to add plug-and-play security features inside containers;
- **A.1.3 SecuritySLA (Unina):** Design of techniques to customize and expose the security level of general-purpose containers, in order to provide hardened container templates;
- **A.1.4: Hardening Implementation (Unicampania):** Support the definition and implementation of the set of security tools and plug-and-play features as designed in task A2;
- **A.1.5: Hardening Pipeline (Unina and Unicampania):** illustrate with a demo and toy examples the soundness of the hardening pipeline executed by the module (i.e., from the requirement parsing to the release of the hardened template).
References


Section b. Methodology

As outlined in the previous section, development of secure applications is a complex issue that involves costly and time-expensive activities. In order to address such complexity Unicampania will rely on the MetaSEnD model that defines several high-level activities that should be included in the development of secure applications. The model complexity outlines the difficulties of addressing security in application development.

Applying the core idea behind MetaSEnD, build a custom secure development life cycle for each given application, we will apply the metamodel to select the activities and best practices that best fit the needs of secure development container. The result will be a selection of tools and techniques to increase the security of containers, addressing objectives 3,4 and 5.

According to the techniques described in [3,4], result of joint work from Unina and Unicampania teams, we will rely on security service level agreement to formally specify the security requirements of containers and we will adopt SLA composition techniques to evaluate the implementation of secured containers integrating additional tools and techniques to existing containers, addressing objectives 1 and 2. Implementation of the Hardening Pipeline for Continuous Integration and of the security tools will imply a dedicated consultancy contract devoted to development of the proof.-of-concepts.Unina and Unicampania allocated 5000€ each for material and equipment directly attributable to the project, specifically servers devoted to host the CI/CD solutions.

WP 2: Behavioral Models of Containers and Security Policy Specification Language

Section a. State-of-the-art and objectives

While container security research, exemplified by [LHC22], is growing, there’s a notable absence in behavioral models and dedicated languages for specifying container security policies. Temporal logics like LTL and modal μ-calculus [Var05, BS07] are used for process behavior, supporting static model-checking [SW91] and dynamic monitoring [MM07, FS15]. Hyper logics, like HyperLTL [FRS15], address hyper properties, but their application to containers is unexplored. [ST10] proposed a mechanism for composing security policies in Service-oriented Architectures, but its applicability to the less-structured container context is unclear. Burco et al. [BMP20] introduced a graph-based model for containers using Bigraphical Reactive Systems (BRSs), enabling the formalization and verification of container properties through graph theory techniques.
Considering the objectives described in the open call, we propose the following activities:

A.2.1 Compositional topological model based on bigraphs: Improvement of compositional graph-based models for containers, building upon prior research, particularly drawing on bigraph-based approaches [BMP20, AMP23]. Presently, these models mostly address the topological aspects of containerized systems, focusing on their connections as defined, for instance, by tools like docker-compose. The outcome will be a formalism for representing the static topology of container-based systems.

A.2.2 Behavioral model for containers: Definition of a behavioral model for containers, capturing security-sensitive operations and supporting the representation of container interfaces, networking aspects, and interactions with the environment and other containers. The model must be compositional, allowing for the incremental construction of behavioral models for container compositions.

A.2.3 Synthesis of the model from observable events: Enhancement of existing behavioral models to incorporate dynamic elements of containerized systems. The proposed semantics will be event-driven, aligning with what can be observed at runtime through monitoring tools for containers, such as communication and interactions. To achieve this, we plan to employ a learning algorithm, similar to Angluin’s L* algorithm, to infer the model from execution traces. The outcome will be a methodology for inferring models from individual containers and their compositions.

A.2.4 Analysis of security policy specification languages: Comprehensive analysis of state-of-the-art specification languages for security policies within the realm of Service-Oriented Architecture (SOA) and web services. Specifically, we will scrutinize variations of Linear Temporal Logic (LTL) and HyperLTL, which have proven effective in representing security properties, including non-interference.

A.2.5 Definition or identification of a security policy specification language: Definition or identification of a policy specification language for expressing security constraints on containers and container ecosystems. This language should accommodate both static security policies (SP) for evaluation at rest and dynamic security policies (DP) for enforcement at runtime. This language will be designed to predicate over events derived from the behavioral models established in the initial phase. From these specifications, we will distill properties suitable for verification at rest and those requiring enforcement at runtime.

A.2.6 Monitor synthesis algorithms for dynamic policies: Development of novel algorithms for monitor synthesis. Such monitoring will complement automated security specification techniques, such as model checking, applied to the model describing container interactions, obtained by combining the static security policy with representations of container connection.

References
Section b. Methodology

Initially, we will advance a compositional graph-based model for containers, building upon prior research, particularly drawing on bigraph-based approaches [BMP20, AMP23]. Presently, these models address the topological aspects of containerized systems, focusing on their connections as defined, for instance, by tools like docker-compose. Our objective is to enhance these models to incorporate dynamic elements of these systems. The proposed semantics will be event-driven, aligning with what can be observed at runtime through monitoring tools for containers, such as communication and interactions. To achieve this, we plan to employ a learning algorithm, similar to Angluin’s L* algorithm, to infer the model from execution traces. The outcome will be a formalism for representing the static topology of container-based systems and a methodology for inferring models from individual containers and their compositions.

Next, we aim to craft a specification language tailored for security policies in containers. This language will be designed to predicate over events derived from the behavioral models established in the initial phase. Our approach involves a comprehensive analysis of state-of-the-art specification languages for security policies within the realm of Service-Oriented Architecture (SOA) and web services. Specifically, we will scrutinize variations of Linear Temporal Logic (LTL) and HyperLTL, which have proven effective in representing security properties, including non-interference. From these specifications, we will distill properties suitable for verification at rest and those requiring enforcement at runtime. For the former, our focus will be on exploring appropriate model-checking algorithms, while for the latter, we will delve into the development of novel algorithms for monitor synthesis.

WP 3: Runtime Policies and Configuration Enforcement

Section a. State-of-the-art and objectives

There are many scenarios such as remote monitoring of critical infrastructures, emergency responses, traffic management and planning, etc. where moving functionality towards the edges has several benefits. Containers technology recognized this by developing container-orchestration systems (i.e., microk8s [1] and k3s [2]) specifically for edge devices. These benefits are even more emphasized if applications running on containers are developed as a combination of microservices. Scalability, portability and fault-tolerance are just few of the attributes that can be better exploited running microservices at the edge. On the other hand, security is more challenging because there is not a
single point of enforcement, data and computations are distributed and the isolation properties are weaker in containers compared to more traditional virtual machines [3]. Of particular interest is the thread model in which the containers must be protected by malicious or semi-honest hosts, thus the underlying operating system cannot be considered fully trusted [4].

An open research challenge is the design of solutions that can at the same time guarantee enforcement of runtime policies (i.e., control flow integrity) and acceptable overheads to be able to run on a wide range of edge devices [5,6].

According to the objectives described in the open call, we propose the following activities:

A.3.1 Security Policies Alignment: Interaction with WP2 to align with the proposed security policy specification language and contribute to the constructs to express properties and aspects of the security policies that need to be enforced at run-time compared to static enforcement and compliance performed at development time.

A.3.2 Threat model and approach definitions: Specification of the threat model. Identification of the appropriate methodologies and technologies to enforce security policies at runtime, also considering the approaches and technologies already used by the other two tasks in the WP3. The aim is to avoid replication and yet allow the conceptual integration of all the chosen methodologies in the workpackage.

A.3.3 Design of novel runtime enforcement techniques: Contribution, in collaboration with Tasks 3.1 and 3.2, to the design and specification of the Runtime Monitoring module. The design should consider how combining the approaches adopted by the tasks (3.1, 3.2 and 3.3) help to cover a wider spectrum of attacks compared to consider each approach in isolation.

A.3.4 Mitigation approaches: Microservices are becoming popular also in cyber-physical scenarios, thus it is of paramount importance to adopt non-disruptive mitigation approaches when a security policy breach is detected that limit attacks without stopping the operativity of the system. This activity studies in-depth how to design mitigations that are compatible with the safety and security constraints of the system.

A.3.5 Test and Validation: Implementation and validation of the enforcement techniques and methods introduced in this task as part of the Runtime Monitoring module.

References
[1] https://microk8s.io/
[2] https://k3s.io/

Section b. Methodology
The WP will be organized such that it starts with an initial step of synchronization and alignment with the main architectural and technological choices already made by the existing Secco project. It’s important to coordinate with WP2 (A.3.1) about the adopted security policy specification language to include the possibility to specify runtime security policy requirements and configurations. It’s also
important to align (A.3.2) with Task 3.1 and 3.2 of the same workpackage to coordinate with the other partners technology and solutions that could complement and integrate what has been already proposed with the aim of broadening and strengthening the enforcement capabilities of the overall Runtime Monitoring module of Secco. The next step (A.3.4) is to make design choices related on how the detection and mitigation of policy violations will be dealt with. Finally, the core of the task can start by proposing novel runtime enforcement solutions (A.3.3) suitable for edge devices and interacting with cloud providers as well as realization of related proof of concept (A.3.5) in order to test and validate the proposed solutions. In that respect, we may need to extend the available testbed with new edge devices and software licences in order to meet the requirements of the usage scenarios that will emerge in WP4.

WP 4: Design and Implementation of the SecCo Service
Section a. State-of-the-art and objectives

According to the objectives described in the open call, we propose the following activities:

A.4.1 Definition of techniques to support the CI/CD security process, both for static and runtime analysis processes. This activity will focus on the definition of the SecCo-OC reference architecture, specifically exploiting concepts such as I/Ocloud [5], VirtIO [5], Deviceless, and FaaS [11], and providing adequate security levels (e.g., SSL-based VLAN and WebSocket [17]).

A.4.2 Definition and extension of the Edge/Cloud architecture: support for containerization technologies. The SecCo-OC architecture will be extended to provide the necessary support for integration with different containerization technologies (e.g., Kubernetes, Kata container, etc.) and in terms of the type of landing devices for the microservice (in Cloud or on Edge device [11]).

A.4.3 Unique orchestration interfaces: SecCo-OC provides a unique point for the infrastructure orchestration based on API. Moreover, we will evaluate the opportunity to integrate a graphical tool [18] for the instantiation of pipelines aiming to support the analysis and the validation of containers that directly leverage the capabilities of the Edge/Cloud platform, both for on-site and remotely performed tests.

A.4.4 Definition of guidelines for integration: This task supports the coordination of components integration activities by providing useful guidelines aiming to make easier and faster the integration process for all the developers in SecCo.

References
Considering the objectives of OC.4 and according to the SecCo Open Call, the definition of an architecture capable of offering techniques and workflows for the structured deployment of pre-assembled components will be realized. The architecture to achieve the objectives set in A.4.1 must, among other things, be able to establish ad-hoc and secure interconnections between the CI/CD components and the components necessary for security checks execution. Objective A.4.2 allows the use of a common interface for developers using different containers (e.g., Docker, Kata container,
etc.) in terms of the technology used, or in terms of the container orchestration platform (e.g., Kubernetes), or in terms of the type of landing devices for the microservice (in Cloud or on Edge device). The architecture aims to enable faster development that benefits from integration with existing solutions even if implemented with different technologies. A.4.3 offers a unique interfacing system to architecture management based on API, and finally, A.4.4 will support the coordination of components’ integration activities by providing useful guidelines aiming to make easier and faster the integration process.

Moreover, A.4.1 and A.4.2 provide access to virtualization techniques and passthrough provided by VirtIO for direct access to host hardware resources or to devices such as sensors and physical actuators present in the container execution environment or virtualized through the remoting filesystem provided by the I/Ocloud paradigm implemented by extending the Stack4Things platform. Finally, A.4.1 and A.4.3 will extend towards the FaaS and Deviceless paradigms to support all phases related to the instantiation of distributed applications, on servers and devices.

UniME has allocated 30000€ for specialist consulting service to support the POC development. UniME has allocated 50000€ for material and equipment directly attributable to the project, specifically considering edge and mobile devices to exploit I/Ocloud and FaaS functionalities in the edge-to-cloud continuum.

Section c. Available instrumentations and resources

Two of the research labs available at the Department of Engineering and Computer Science at UNITN, the Networking and Security Lab and the IoT Testbed can provide the initial research environment, the core technology and instrumentation to start developing, test and validate the expected results of the proposed research.

One of the main resources of the UNIME Principal Investigator’s research group is the cornerstone technological prowess named Stack4Things, i.e. an OpenStack-based Internet of Things framework. This software is a testament to the lab's commitment to simplifying IoT device management, transcending physical location constraints, network configurations, and underlying technology differences. Stack4Things is recognized for its cloud-oriented approach, which enables seamless IoT object virtualization, customization, and orchestration, thereby providing an intuitive experience across various embedded and mobile systems. In particular, UNIME has a fully available Stack4Things installation where edge-to-cloud experiments can be executed. Furthermore, several IoT devices and boards are available for deployment. Strong cooperation with the university spin-off company Smartme.io will ensure access to its labs and experimental setup for on-site tests.

Moreover, UNIME can further exploit its know-how about the Research Infrastructure (RI) named SoBigData, realized in an ongoing project linked to SLICES-PP. This RI can be useful for the SecCo-OC proposal because its aim is to provide a research infrastructure exploitable to test scripts and modules defined during the investigation phases of research. RI offers also the possibility to exploit one or more datasets available in the platform.
Section d. GANTT diagram

Section e. Milestones, Deliverables, and KPI

Milestones:
MS1: Month 9: Stable methodologies and preliminary design
MS2: Month 16: Final Design and proofs-of-concept

Deliverables:
D1: Advancement reports of activities, Delivery: M9, Type: Report, A Report summarizing the Activities status and the results obtained in each WP.
D2: Final reports of activities, Delivery: M16, Type: Report, A Report summarizing the final results obtained in each WP.

KPI:
Publications: 2 Journal submitted, 6 Conference papers submitted
Code: 1 Account GitHub with 1 repository of proof-of-concepts software

Annexes: Curriculum vitae research team
Appendice dell’Allegato B

Curriculum vitae PI or CO-PI (max. 5 pages)

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Date of birth:
Nationality:
URL for web site: mdslab.unime.it

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1988 Master, Dipartimento di Ingegneria, Università di Catania, Italia

CURRENT POSITION(S)
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PREVIOUS POSITIONS
1998 - 2003 Prof. Associato, Dipartimento di Ingegneria, Università di Messina, Italia
1995 - 1998 Ricercatore, Dipartimento di Ingegneria, Università di Palermo, Italia

FELLOWSHIPS AND AWARDS
1994 - 1995 Fellowship Engineering Department, Duke University, USA
2015 Visiting professor Indian Institute of Information Technology, Allahabad (India)
2016 Visiting professor University of Innopolis (Russia)

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<td>Design and realization of the integrated voice/data network of the new Engineering Faculty of Università di Messina.</td>
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<td>2.</td>
<td>Finalist winner of the Prize ForumPA 2008 “Protagonista dell’innovazione”</td>
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<td>AFIN '10 Proceedings of the 2010 Second International Conference on Advances in Future Internet</td>
<td>2010</td>
<td>A. Celesti; F. Tusa; M. Villari; A. Puliafito. Three-phase Cross-cloud Federation Model: The Cloud Sso Authentication</td>
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<td>10th IEEE International Conference on Ubiquitous Intelligence and Computing</td>
<td>2013</td>
<td>D. Mulfari; A. Celesti; M. Villari; A. Puliafito, Using Virtualization and Guacamole/vnc To Provide Adaptive User Interfaces To Disabled People In Cloud Computing</td>
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**SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS**

Relatore di un centinaio di tesi di laurea sia triennali che magistrali, tutte inerenti il settore ING-INF/05.

Relatore di 26 tesi di dottorato, tutte inerenti il settore ING-INF/05

**ORGANISATION OF SCIENTIFIC MEETINGS**

- 6th International Workshop on Petri Nets and Performance Models (PNPM'95), Durham, North Carolina, Oct 3-6, 1995 (Local arrangement and Financial Chair).
- 10th European Simulation Multiconference, Budapest, Hungary, June 2-6, 1996.
- Evaluation Conference on Inter University Cooperation in Europe in the Field of Computing, Dublin, Ireland, July 1-3, 1996.
- 5th Int. Conference on Fuzzy Theory and Technology, Durham (USA), March 1-5, 1997.
- 3rd Int. Conference on Computer Science and Informatics, Durham (USA), March 1-5, 1997.
- 11th European Simulation Multiconference, Instanbul, Turkey, June 1-4, 1997.
- IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks WOWMOM 2005), Taormina – (Italy) 13-16 July 2005 (Local organization Chair).
International Conference on High Performance Computing and Communications (HPCOM), Sorrento – (Italy) 21-23 September 2005 (Technical co-chair)
- 4th International Conference on Ubiquitous Intelligence and Computing (UIC-07), Hong Kong, July 11-13, 2007 (program co-chair).
- 13th IEEE Workshop on Dependable Parallel, Distributed and Network-Centric Systems (DPDNS'08), April 14-18, 2008, Miami, Florida (USA) (program chair).
- Workshop on Informatica Quantitativa (InfQ), 27-29 Giugno 2011, Lipari (Italy) – (General Chair)
- 17th IEEE Workshop on Dependable Parallel, Distributed and Network-Centric Systems, May 21-25, 2012, Shanghai, China.
- International Workshop on Extending Seamlessly to the Internet of Things - esIoT 2012 – July 4-6, Palermo (Italy).
- 12th IEEE International Symposium on Network Computing and Applications (IEEE NCA13), 22-24 August 2013, Boston (USA)
- 4th IEEE Symposium on Network Cloud Computing and Applications (NCCA2015), June 11-12, Munich (program co-Chair).
- 2nd International Workshop on Sensors and Smart Cities (SSC 2016), 18 May 2016, S. Louis – USA (General Chair).
- 10th EAI International Conference on Performance Evaluation Methodologies and Tools (Valuetools 2016), October 2016, Taormina Italy (General Chair).
- Eighth International Workshop on Software Aging and Rejuvenation (WOSAR 2016), October 23 and October 27, 2016, Ottawa, Canada.
- Ad-Hoc, Mobile and Wireless Networks: ADHOC-NOW 2017, June 2017, Taormina Italy (General Chair).
- 4th IEEE SmartComp Conference, June 2018, Taormina Italy (TPC Chair).
- 11th IEEE International Conference on Internet of Things (iThings 2018), Halifax (Canada), July 30 – August 3, 2018 (Technical co-chair).
- 12th IEEE International Conference on Internet of Things (iThings 2019), Atlanta (USA), 14-17 Luglio 2019 (General co-Chair).
The 23th International Conferences on High Performance Computing and Communications (HPCC-2021), 17-19 December 2021, Haikou, Hainan, China (General Co-chair).
IEEE Global Communications Conference, 4–8 December 2022, Rio de Janeiro, Brasile.
I-CiTies 2024, 17-20 September 2024, Taormina, Italy (General Chair).

§ INSTITUTIONAL RESPONSIBILITIES
- Coordinatore del corso di studi in Ingegneria Informatica (2000 - 2012)
- Coordinatore del corso di dottorato di ricerca in Tecnologie avanzate per l’ingegneria dell’informazione (2000 - 2010)
- Responsabile ERASMUS per la Facoltà di Ingegneria di Messina (1998 - 2010)
- Coordinatore del Dottorato Internazionale in Cyber Physical Systems (2017-2021)
- Vice Presidente del Consorzio InterUniversitario COMETA per il calcolo ad alte prestazioni sino al 2008.
- Direttore del laboratorio Wireless ed RFID dell’Università di Messina (in collaborazione con Oracle ed Intel)
- Direttore del Center on Information Technology and their Applications (CIAM) dell’Università di Messina (2006-2009 e 2013-2018)
- Direttore del Laboratorio Nazionale CINI “Smart cities & Communities” (2018 – ad oggi).
- Responsabile dell'iniziativa di Crowdfunding #SmartME per la realizzazione di una infrastruttura di sensori collegata al Cloud all'interno della città di Messina (smartme.unime.it). L'obiettivo è quello di creare un Cyber Physical System di estensione metropolitana in cui sviluppare ed offrire servizi tipo: monitoraggio ambientale, mobilità intelligente e di energy management.
- Componente commissione esaminatrice CNR del concorso pubblico per titoli per l’assunzione con contratto di lavoro a tempo pieno e indeterminato di una unità di personale con il profilo di dirigente di ricerca - I livello professionale. Bando N. 367.153 DR – Area Strategica Informatica (2018)
- Componente commissione AQ - Dipartimento di Ingegneria (2018 – ad oggi)
- Componente commissione orientamento e tutorato - Dipartimento Ingegneria (2017 – ad oggi)
- Componente di numerose commissioni di concorso per RTD, Associato ed Ordinario banditi dalle Università italiane (BO, CT, MO, PI, Polimi, BA, NA, MI, TO, PV, LE, PA)
- Fondatore e responsabile scientifico Inquadro srl, spin-off accademico Università di Messina con Inquadro srl (2005-2011)
- Fondatore e responsabile scientifico di SmartMe.io, spin-off accademico Università di Messina (2017 – ad oggi). Oltre 30 dipendenti ed un fatturato annuo > 1ME.
ξ REVIEWING ACTIVITIES


Ha svolto le seguenti attività di revisore scientifico: Commissione Europea dal 1998 di progetti per il 4, 5, 6 e 7 programma quadro e Horizon 2020, progetti PRIN, Fondazione Alexander von Humboldt, Agenzia for Science, Technology and Research (A*STAR)-Singapore, Swiss National Science Foundation, The National Centre for Research and Development (Polonia), Regione Emilia Romagna, Regione Puglia, Khalifa University.

ξ MEMBERSHIPS OF SCIENTIFIC SOCIETIES (if applicable)
2020 – Member, Research Network “SLICES”
1995 – Member IEEE

ξ MAJOR COLLABORATIONS (if applicable)
● Kishor S. Trivedi, Duke University, Usa: System modeling
● Miklos Telek, University of Budapest, Ungheria: System modeling
● Symeon Papavassilou, National Technical University, Grecia: Smart Cities
● Joao Haro, University of Cartagena, Spagna: LoRA protocol
● Andrea Passarella, CNR, Italia: Research infrastructures
● Jannong Cao, Polytechnic of Hong Kong: Internet of things
● Adnan Al-Anbuky, Auckland University, New Zeland: Cyber Physical Systems
Curriculum vitae CO-PI MASSIMILIANO RAK

PERSONAL INFORMATION
Family name, First name: RAK, MASSIMILIANO
Researcher unique identifier(s) (such as ORCID, Research ID, etc. ...): 0000-0001-6708-4032
Date of birth: / / 
Nationality: 
URL for web site: https://www.ingegneria.unicampania.it/dipartimento/docenti?MATRICOLA=058401

EDUCATION
2003 PhD Ingegneria Elettroniche
Seconda Università degli Studi di Napoli (now Università della Campania Luigi Vanvitelli)
Supervisor: Nicola Mazzocca

1999 Laurea Degree (Master degree)
Ingegneria Informatica, 1. Università degli Studi Federico II, luglio 1999

CURRENT POSITION(S)
2016 – Associate professor
Dipartimento di Ingegneria, Università della Campania Luigi Vanvitelli

PREVIOUS POSITIONS
2002 – 2016 Aggregate professor (Researcher)
Dipartimento di Ingegneria, Università della Campania Luigi Vanvitelli

FELLOWSHIPS AND AWARDS
2011 Collaboration and hosting in misoara as external collaborator project FP7-ICT-SPRERS
2002 Hosted at Institute of Software Science in Vienna

SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS (if applicable)
2002 – today
Supervisor for about 10 bachelor degree thesis per year, 5 master degree thesis per year
Supervisor for 7 PhD students

ORGANISATION OF SCIENTIFIC MEETINGS (if applicable)
General Chair THE 14TH IEEE INTERNATIONAL CONFERENCE ON CLOUD COMPUTING TECHNOLOGY AND SCIENCE
Co-Chair, IFIP-ICTSS 2020, 32ND IFIP INTERNATIONAL CONFERENCE ON TESTING SOFTWARE AND SYSTEMS, 9-10 December, Naples, Italy
General Track Chair, 2019 IEEE 28th International Conference on Enabling Technologies: Infrastructure for Collaborative Enterprises (WETICE), June 12 2019 to June 14 2019, Napoli, Italy
Track Chair, 2013 Eighth International Conference on P2P, Parallel, Grid, Cloud and Internet Computing dal 28-10-2013 al 30-10-2013 Workshop Chair, Workshop on “Accountability and SLA management for the cloud” co-located with SecureCloud 2014 dal 03-04-2014 al 03-04-2014
Program Chair, 8th International conference on Information assurance and Security (IAS12) dal 21-11-2012 al 23-11-2012
Workshop Co-Chair, Security and Performance of Emerging Distributed Architectures (SPEDA) dal 23-08-2010 al 25-08-2010
General Chair, 4th International conference on Information assurance and Security (IAS08) 08-09-2008 al 10-09-2008

**INSTITUTIONAL RESPONSIBILITIES (if applicable)**
- Delegato Dipartimentale per la Ricerca e la terza Missione nel presidio di qualità di Ateneo (dal 2023)
- Referente della Qualità per il Dipartimento di Ingegneria per le attività di terza Missione (dal 2023)
- Referente della Qualità per il corso di studio in Ingegneria Elettronica e Informatica L-8 (dal 2022)
- Membro della Commissione Terza Missione di Dipartimento (dal 2021)
- Membro del CTS Consorzio Meditech in qualità di rappresentante dell’Ateneo
- Delegato del rettore, Assemblea dei soci del CeRICT (20/5/2015, prot. 30180), 2015
- Delegato del rettore, Assemblea dei soci del CeRICT (24/5/2016, prot. 23096), 2016
- Delegato del rettore, Assemblea dei soci di RIMIC (20/12/2016, prot. 151130), 2016
- Delegato del rettore, Assemblea dei soci del CeRICT (19/7/2018, prot. 95836), 2018
- Delegato del rettore, Assemblea dei soci del CeRICT (11/07/2019, prot. 96264), 2019
- Delegato del rettore, Assemblea dei soci del CeRICT (07/07/2020, prot. 84841), 2020
- Delegato del rettore, Assemblea dei soci del CeRICT (07/07/2020, prot. 84841), 2021
- Rappresentante, Membro della Giunta di Dipartimento (Dipartimento di Ingegneria dell’informazione – DII) in qualità di rappresentante dei Ricercatori
- Rappresentante, Membro del Consiglio di Facoltà (Facoltà di Ingegneria) in qualità di rappresentante dei Ricercatori
- Rappresentante, Membro del Consiglio di Dipartimento (Dipartimento di Ingegneria Industriale e dell’informazione) in qualità di rappresentante dei Ricercatori
- Membro Commissione Di Dottorato (Internazionale), commissione di dottorato - Universitat Politecnica de Catalunya (UPC) - Barcellona dal 05-05-2008 al 05-05-2008
- Membro della Commissione Finale di Dottorato XXXII ciclo, Università degli studi del Sannio
- Membro della Commissione Finale di Dottorato XXXIV ciclo, Università degli studi di Genova
Membro della Commissione Finale di Dottorato XXXIV ciclo, Università degli studi di Napoli Federico II
Presidente di Commissione di concorso per un posto da tecnico di livello C, Università degli studi di Salerno (DR/2022/2651 del 21/09/2022 – Università di Salerno) 2022
Presidente di Commissione di concorso per un posto da tecnico di livello D, Università degli studi di Salerno (DR/2022/2652 del 21/09/2022 – Università di Salerno) 2022
Commissionario di concorso Proroga RTD-A, Università degli studi di Genova (DR/2023/1403 del 21/03/2023 – Università di Genova) 2023
Commissionario di concorso Proroga RTD-A, Università Federico II (DR/2020/2864 del 15/09/2020 – Università Federico II) 2020
Commissionario di concorso Proroga RTD-A, Università Federico II (DR/2020/3347 del 20/10/2020 – Università Federico II) 2020
Commissionario concorso Ricercatore, - Università Parthenope - CODICE BANDO R/10/2007 (DR 406 8/7/2008 – Università Parthenope) 2008

**REVIEWS ACTIVITIES (if applicable)**
Massimiliano Rak, inoltre, partecipa ed ha partecipato, in qualità di membro del Program Committee alla organizzazione di numerose Conferenze Internazionali, ha inoltre svolto attività di session chair in numerose conferenze. A titolo non esaustivo si riportano alcuni dei riferimenti più recenti

**MEMBERSHIPS OF SCIENTIFIC SOCIETIES (if applicable)**

- **OMG Cloud Working Group**, membro del WG dedicato al Cloud dell’OMG, nell’ambito del quale ha assunto il ruolo di leader per la scrittura di chapter dei whitepaper OMG.
- **CSA Metrics subgroup**, Membro del Working Group internazionale “CSA Metrics subgroup” organizzato dalla Cloud Security Alliance (CSA) e parte del Cloud Trust working group (CSA CT wg) per la costruzione di un catalogo di metriche di sicurezza a cui partecipano membri di numerosi progetti europei coinvolti su tali tematiche. dal 01-01-2014 a oggi
- **Cloud Standard Customer Council**, Membro del Cloud Standard Customer Council dal 01-01-2014 a oggi
- **EU Cluster on New Approaches for Infrastructure Services**, Membro nel EU Cluster on New Approaches for Infrastructure Services (Clusters of European Projects on Cloud), come rappresentante del Progetto SPECS e del Progetto MUSA dal 01-01-2015 a oggi
- **Laboratorio CINI-CyberSecurity**, Membro del CINI e Afferente al laboratorio nazionale CINI-CyberSecurity dal 01-01-2015 a oggi
- **EU Cluster on Data Protection, Security and Privacy**, Membro nel EU Cluster on Data Protection, Security and Privacy (Clusters of European Projects on Cloud), come rappresentante del Progetto SPECS dal 01-01-2015 a oggi
- **EU Cluster on Data Protection, Security and Privacy**, Chair del Working Group WG1: Advanced security and data protection mechanisms, dal 01-01-2015 a oggi

**MAJOR COLLABORATIONS (if applicable)**

Dana Petcu, Madalina Erascu (Institute E-Austria Timisoara, Romania), Erkuden Rios (Technalia, Spagna), Daniel Vladusic, Jolanda Modic (XLAB, Slovenia).

Exact dates Please indicate the reason and the duration in months.
CURRICULAE VITAE UniCampania

PERSONAL INFORMATION

Family name, First name: Aversa Rocco
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Nationality: 
Place of birth: ( )
Date of birth: / / 
Researcher unique identifier(s) https://orcid.org/0000-0002-3554-0336

EDUCATION

1989 – Master’s degree Electronic Engineering at University of Naples “Federico II”
1994 - Ph.D. in Electronic Engineering at University of Naples “Federico II”

CURRENT POSITION(S)

Full Professor (S.C. 09/H1 - S.S.D. ING/INF-05) Dipartimento di Ingegneria dell’Università degli Studi della Campania “L. Vanvitelli”

PREVIOUS POSITIONS

February 2005/December 2020 – Associate Professor (S.C. 09/H1 - S.S.D. ING/INF-05) Dipartimento di Ingegneria dell’Università degli Studi della Campania “L. Vanvitelli”.

ORGANISATION OF SCIENTIFIC MEETINGS (if applicable)

He organized as WORKSHOP CHAIR the Symposium "Distributed Computing: Tools, Paradigms and Infrastructures" within the 7th International Workshop, PARA 2004, Lyngby, Denmark.
He was designated member of the STEERING COMMITTEE of the 2nd International Conference on Computer, Informatics, Cybernetics and Applications 2012 (CICA 2012), Chongqing, China.
He organized as WORKSHOP CHAIR the International Symposium on Advances of Distributed and Parallel Computing (ADPC 2013) in conjunction with 13th International Conference on Algorithms and Architectures for Parallel Processing (ICA3PP 2013)

INSTITUTIONAL RESPONSIBILITIES (if applicable)

Since October 2004, Rocco Aversa has been responsible for the three-year degree course in Computer Engineering, and is currently coordinator of the Master's Degree course in Computer Engineering, for which he takes care of relations with students, and manages the procedures for the Class Council.
In March 2021 he was elected member of the Engineering Department Board as representative of the full professors.
In 2005 and afterwards in 2014, he was appointed in the board of the directors of the consortium "Centro Regionale Information e Communication Technology" as the representative of Università degli Studi della Campania “L. Vanvitelli”. The main goal of the consortium is the coordination and the harmonization of the regional scientific research in
Information and Communication Technology and the enhancement of the technological transfer towards the business companies in the field.

**REVIEWS ACTIVITIES (if applicable)**
He is Associate Editor of International Journal of Web Science (IJWSM – Inderscience Publishers).

**PARTICIPATION IN RESEARCH PROJECTS**
2022–now. Member of the research group within the scientific project PON RASTA “Realtà Aumentata e Story-Telling Automatizzato per la valorizzazione di Beni Culturali ed Itinerari” supported by the Italian government.


2019–2012. Member of the research group within the scientific project “CLEOPATRA: CoLlaborative ExploratiOn of cyber-PhysicAl cuITuRal IAndscapes”, supported by the University of Campania “L. Vanvitelli”.

2018–2020. Task leader in the European scientific project “GreenCharge” supported by the European Commission under the “Horizon H2020 Framework Programme”.

2013–2017. Member of the research group within the scientific European project “CoSSMic (Collaborating Smart Solar-powered Micro-grids) supported by the European Commission under the 7th Framework.

2013-2016. Member of the research group within the scientific European project CRITCAL – CRitical sYStem engineering AcceLeration supported by the European Commission under the 7th Framework.

2014-2016. Member of the research group within the scientific project POR CAMPANIA FESR 2007/2013 - InTegrated and INteroperable systEm for Railway Enhanced applications (ITINERE).

2012-2015. Member of the research group within the scientific project IT-MIUR PON “Laboratori Pubblico-Privati”, progetto DISPLAY - Distributed hybrid Simulation PLAform for ATM and VTS Systems.

2013-2015. Member of the research group within the scientific project IT Regione Campania CAMPUS, progetto MyOpenGov.

2010-2012 Member of the research group within the scientific project PRIN (Project of Relevant National Interest), Cloud@home: a new Enhanced Computing Paradigm, Funded by Ministry of Research (DM n.1407 4 April 2009)

2010–2013. Workpackage leader of the team working on the design aspects of the mOSAIC (Open-Source and API Platform for Multiple Clouds) European scientific project supported by the European Commission under the 7th Framework.


2006-2009. Member of the research group within the scientific project the MIUR Project( FAR), LC3 - LABORATORIO PUBBLICO-PRIVATO DI RICERCA SUL TEMA DELLA COMUNICAZIONE DELLE CONOSCENZE CULTURALI - National Project of Ministry of Research MIUR DM1791.
2004-2006. Coordinator of the Second University of Naples research group working in the project "Centre on Information and Communication Technology", supported by Regione Campania with a financing of more than one million of euros.


2001-2002. Member of the research group within the scientific project the PRIN (Project of Relevant National Interest), ISIDE - Sistemi di elaborazione reattivi ed affidabili per applicazioni industriali, Funded by Ministry of Research (MURST)

1998-2000 Coordinator of the research group of the Second University of Naples in the strategic national research project "Progettazione e valutazione di applicazioni di telecollaborazione e telecontrollo per sistemi multimediali"
PERSONAL INFORMATION
De Benedictis Alessandra
Researcher unique identifier(s) (ORCID): 0000-0001-7455-4653
Date of birth:
Nationality:
URL for website: https://www.docenti.unina.it/alessandra.debenedictis

· EDUCATION
  2013  PhD in Computer and Automation Engineering
        (ex)Dipartimento di Informatica e Sistemistica, University of Naples Federico II, Italy
        PHD Supervisor: prof. Valentina Casola
  2009  Master in Computer Engineering
        (ex)Dipartimento di Informatica e Sistemistica, University of Naples Federico II, Italy

· CURRENT POSITION(S)
  2021 – today  Tenured Assistant Professor (RTD-B)
                 Department of Electrical Engineering and Information Technology, University of Naples Federico II, Italy

· PREVIOUS POSITIONS
  2019 – 2021  RTD-A
                 Department of Electrical Engineering and Information Technology, University of Naples Federico II, Italy

· FELLOWSHIPS AND AWARDS
                 Department of Electrical Engineering and Information Technology, University of Naples Federico II, Italy
  2011, 2012  Visiting Researcher
                 George Mason University, Virginia, USA
  2020-2029  Associate Professor qualification (Abilitazione Scientifica Nazionale II fascia) in the scientific sector ING-INF/05, 09/H1 Sistemi di Elaborazione delle Informazioni in 2020.

· SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS (if applicable)
  2021 – 2024  2 PhD Students, more than 30 Master’s and Bachelor’s Students
                 Department of Electrical Engineering and Information Technology, University of Naples Federico II, Italy

· ORGANISATION OF SCIENTIFIC MEETINGS
  2023  Scientific Program Chair of the 14TH IEEE INTERNATIONAL CONFERENCE ON CLOUD COMPUTING TECHNOLOGY AND SCIENCE (CloudCom 2023).
  2021  Steering Committee member for the IFIP International Conference on Testing Software and Systems (IFIP-ICTSS).
  2020  Scientific Program Chair of the 32nd IFIP International Conference on Testing Software and Systems (ICTSS 2020)
2017  Scientific Program Chair of the 1st Workshop on Cloud Security Modeling, Monitoring and Management (CS3M), co-located with GPC 2017 – the 12th International Conference on Green, Pervasive and Cloud Computing

2019  Track Co-Chair of the track "IoT, Semantics and Adaptive M2M/HCI Interfaces" within 13-th International Conference on Complex, Intelligent and Software-intensive Systems (CISIS-2019)

· INSTITUTIONAL RESPONSIBILITIES

2021 – 2023  Incoming Student Orientation referee for the Course in Computer Engineering at the University of Naples Federico II 2019 – 2024  Member of the "Social media commission" at the Course in Computer Engineering at University of Naples Federico II

2019 – 2024  Referee for the Department of Electrical Engineering and Information Technology of the University of Naples Federico II for the Young Women Empowerment Program in collaboration with Ortygia Business School and Intesa SanPaolo

2023  Referee for the Department of Electrical Engineering and Information Technology of the University of Naples Federico II for the “Fintech Project Work” initiative with Intesa SanPaolo

2019 – 2024  Member/president of several Commissions for granting research scholarships to graduate and PhD students at the DIETI of the University of Naples Federico II

· REVIEWING ACTIVITIES (if applicable)


2023  PhD Thesis External Examiner for a PhD Student of the University of Sannio, Italy

MEMBERSHIPS OF SCIENTIFIC SOCIETIES

2019 – 2024  Member, National CINI Cybersecurity laboratory, HPC Key Technologies and tools laboratory, Embedded Systems and Smart Manufacturing laboratory.

· MAJOR COLLABORATIONS (if applicable)

Massimiliano Albanese and Sushil Jajodia (George Mason University),
Madalina Erascu (Institute E-Austria Timisoara, Romania),
Douglas D. J. de Macedo (Federal University of Santa Catarina, Florianopolis, Brasile),
Erkuden Rios (Technalia, Spagna),
Jolanda Modic (XLAB, Slovenia).

· CAREER BREAKS

Sept17-Feb18  Maternity leave for 5 months
PERSONAL INFORMATION

Family name, First name: **Casola, Valentina**
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Date of birth:
Nationality:
URL for web site:
https://www.docenti.unina.it/#!/professor/56414c454e54494e414341534f4e4143534c564e54375523630463833951/curriculum

EDUCATION

2004 PhD Ingegneria Elettronica
Facoltà di Ingegneria della Seconda Università degli Studi di Napoli
Supervisor: prof. Antinino Mazzeo
2001 Laurea (Master) Degree
Ingegneria Elettronica conseguita presso l’Università degli studi di Napoli Federico II

CURRENT POSITION(S)

2015 – today Associate Professor
Dipartimento di Ingegneria Elettrica e delle Tecnologie dell’Informazione (DIETI, ex-DIS) dell’Università degli Studi di Napoli “Federico II

PREVIOUS POSITIONS

2005 – 2015 Aggregate Professor (researcher)
Dipartimento di Ingegneria Elettrica e delle Tecnologie dell’Informazione (DIETI, ex-DIS) dell’Università degli Studi di Napoli “Federico II

FELLOWSHIPS AND AWARDS

2003 IBM PhD Fellowship.
2004 IBM PhD Fellowship award

SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS (if applicable)

- Supervisor of more than 6 Phd Students

ORGANISATION OF SCIENTIFIC MEETINGS (if applicable)

- 2023 General Co- Chair of the 14TH IEEE INTERNATIONAL CONFERENCE ON CLOUD COMPUTING TECHNOLOGY AND SCIENCE (CloudCom 2023). 2023
- 2021 Steering Committee member for the IFIP International Conference on Testing Software and Systems (IFIP-ICTSS).
- 2020 General Chair of the 32nd IFIP International Conference on Testing Software and Systems (ICTSS 2020)
- 2012 Workshop e Special Session Chair della conferenza “The 8th International Conference on Information Assurance and Security” (IAS2012);
- 2011 Program Co-Chair della conferenza “The 7th International Conference on Information Assurance and Security” (IAS2011);
- 2010 Co-Chair del Workshop “Security and Performance in Emerging Distributed Architectures” (SPEDA2010);
- 2008 Program Co-Chair della conferenza “The 4th International Conference on Information Assurance and Security” (IAS2008);

INSTITUTIONAL RESPONSIBILITIES (if applicable)

- Convenzione tra il DIS e il Ministero della Giustizia - Palazzo Giustizia: per attività di progettazione di un sistema web-based per la gestione e manutenzione dei sistemi di sicurezza antincendio del Palazzo di Giustizia di Napoli.
- Convenzione tra il DIS e AMRA scarl: per attività di progettazione di sistemi per l’interoperabilità delle reti di sensori.
- Convenzione tra il CERICT e Ansaldo sts: per attività di progettazione di un sistema dimostratore per la sicurezza delle reti di sensori, nell’ambito del progetto europeo pShield.
- Convenzione tra il CERICT e Inova s.r.l.: per attività di supporto alla progettazione di applicazioni per smartphone e strumenti per l’ottimizzazione di call center.
- Convenzioni con la Direzione Generale Sistemi Informativi del Ministero della Giustizia: per attività di consulenza relativa alla definizione di architetture per l’integrazione delle applicazioni e dei dati del ministero della giustizia sul territorio nazionale;
- Convenzione con la Fondazione Pascale: per attività di consulenza relativa alla definizione di architetture per l’integrazione delle applicazioni e dei dati dell’Ospedale Pascale;
- Convenzioni con il Consiglio Nazionale del Notariato: per attività di consulenza relativa alla definizione di architetture per l’archiviazione e la conservazione a norma di documenti elettronici.
- Membro del gruppo di lavoro a supporto del presidente del Corso di Laurea in Ingegneria Informatica dell'Università di Napoli Federico II per la valutazione delle pratiche studenti (2010-2011).
- Membro aggiunto supplente per la prova di informatica della Commissione del Concorso, per esami, per l’ammissione alla prima classe dei corsi regolari dell’Accademia Aeronautica per l’a.a. 2015/2016 (2015).
- Presidente di due Commissioni per le prove di orientamento presso la Facoltà di Ingegneria dell’Università degli Studi di Napoli “Federico II”.

• oltre 15 Commissioni per la Procedura di valutazione comparativa per il conferimento di incarichi di collaborazione coordinata e continuativa, prestazioni occasionali e borse di studio presso i Dipartimenti DIS e DIETI;
• oltre 5 Commissioni giudicatrice del Concorso, per titoli e colloquio, per il conferimento di assegni di ricerca (progetto EMBEDDED/Reti Eccellenza, progetto ScoPE) dell'Università di Napoli Federico II.
• oltre 5 Commissioni per il Collaudo e Controllo della regolare esecuzione della fornitura per gli acquisti relativi a diverse gare di acquisto beni presso i Dipartimenti DIS e DIETI;
PERSONAL INFORMATION
Family name, First name: Barone, Salvatore
Researcher unique identifier(s): ORCID 0000-0003-2007-3744
Date of birth: / / 
Nationality: 
URL for web site:

EDUCATION
2022 PhD in Information Technology and Electrical Engineering (ITEE)
Università degli studi Federico II
Supervisor: prof. Antonino Mazzeo
2015 Master Degree
DIETI, Università degli studi Federico II

CURRENT POSITION(S)
2022 – today RTD-A
DIETI, Università degli studi Federico II

PREVIOUS POSITIONS
2022 – 2022 Ricercatore invitato presso
l’Institute Nanotechnology De Lyon (INL), sito dell’É cole Centrale de Lyon (ECL) - Université de Lyon/Centre National de la Recherche Scientifique (CNRS)
2022 – 2022 Assegno di Ricerca
DIETI, Università degli studi Federico II

ORGANISATION OF SCIENTIFIC MEETINGS (if applicable)
- Guest Editor per Special Issue “Emerging Topics in Cybersecurity: Challenges and Solutions”, Electronics (ISSN 2079-9292)
- Publicity Chair per “The 19th IEEE Workshop on Silicon Errors in Logic – System Effects (SELSE 2023)”
- Program commitee member della track “Safety, Security and Privacy”, “15th International Conference on the Quality of Information and Communications Technology (QUATIC2022)” Talavera de la Reina, Spain.

INSTITUTIONAL RESPONSIBILITIES (if applicable)
- Commissione Rif.: Prot. B 005 2023: CA 3359 2022 H1 2023 01 ESSM, su nomina CINI
- Commissione Rif.: Prot. B 006 2023: CA 3359 2022 I2 2023 01 ESSM, su nomina CINI
- Commissione Rif.: Prot. B 010 2023: CA 3359 2022 H1 2023 02 ESSM, su nomina CINI.
- Commissione Rif.: Prot. B 015 2023: CA 3359 2022 H1 2023 02 ESSM, su nomina CINI.
REVIEWING ACTIVITIES (if applicable)

- IEEE Transactions on Industrial Informatics
- IEEE Transactions on Emerging Topics in Computing
- Special Issue on Design, Technology, and Test of Integrated Circuits and Systems.
- Future Generation Computer Systems
- Swarm and Evolutionary Computation
- 25th Design, Automation and Test in Europe Conference (DATE 2022)
- 14th International Conference on the Quality of Information and Communications Technology (QUATIC 2021)
CURRICULA VITAE UniUD

PERSONAL INFORMATION
Family name, First name: Riccio, Vincenzo
Researcher unique identifier(s) (ORCID): 0000-0002-6229-8231
Date of birth:
Nationality:
URL for website: https://p1ndsvin.github.io/

ξ EDUCATION
2019 PhD in Information Technology and Electrical Engineering
Dipartimentodi Ingegneria Elettrica edelle Tecnologie dell'Informazione (DIETI), Università degli Studi di Napoli Federico II, Napoli, Italy
Supervisor: Anna Rita Fasolino
2015 Master of Science in Computer Science and Engineering
Dipartimentodi Ingegneria Elettrica edelle Tecnologie dell'Informazione (DIETI), Università degli Studi di Napoli Federico II, Napoli, Italy

ξ CURRENT POSITION(S)
2022 – Assistant Professor (Ricercatore a Tempo Determinato di tipo B - RTDB)
Department of Mathematics, Computer Science and Physics (DMIF), University of Udine, Udine, Italy

ξ PREVIOUS POSITIONS
2019 – 2022 PostDoc Researcher
Software Institute, Università della Svizzera Italiana (USI), Lugano, Switzerland

ξ FELLOWSHIPS AND AWARDS
2020 ACM SIGSOFT Distinguished Artifact Award for the paper “Taxonomy of Real Faults in Deep Learning Systems”, ACM SIGSOFT
2015 – 2019 Scholarship for the Ph.D. Program of the Università degli Studi di Napoli Federico II. Provided by Università degli Studi di Napoli Federico II, Italy

ξ SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS
2022 – present 1 PhD student Department of Mathematics, Computer Science and Physics (DMIF), University of Udine, Udine, Italy
2019 – present 1 PhD student, 2 Master students Software Institute, Università della Svizzera Italiana (USI), Lugano, Switzerland
2015 – 2019 1 Master student Università degli Studi di Napoli Federico II, Napoli, Italy

ξ ORGANISATION OF SCIENTIFIC MEETINGS
2025 Member of the organizing committee (Finance co-chair), IEEE International Conference on Software Testing, Verification and Validation (ICST) 2025
2024 Member of the organizing committee (Diversity, Inclusion and Newcomers co-chair), IEEE International Conference on Software ANalysis, Evolution and Reengineering (SANER) [CORE
2024 Member of the organizing committee (Hot off the Press co-chair), International Symposium on Search-Based Software Engineering (SSBSE) [CORE ranking: B]
2024 Program co-organizer, International Workshop on Search-Based and Fuzz Testing (SBFT)
2021, 2022, 2023 Member of the organizing committee (Tool Competitions co-chair), International Workshop on Search-Based and Fuzz Testing (SBFT)
2021, 2022 Program co-organizer, #FormulaUSI, hackathon at Software Institute, Università della Svizzera Italiana (USI), Lugano, Switzerland (2 editions, 19 teams, 4 keynote speakers, 5 panelists)

**§ INSTITUTIONAL RESPONSIBILITIES (if applicable)**

2022-present – Faculty member, Department of Mathematics, Computer Science and Physics (DMIF), University of Udine, Udine, Italy
2022-2023 - Secretary for the Degree Programme Council, Department of Mathematics, Computer Science and Physics (DMIF), University of Udine, Udine, Italy
2023-present - Member of the PhD board for the PhD Course in Computer Science and Artificial Intelligence, University of Udine, Udine, Italy
2023 - Member of an examining board for the entrance exams (TOLC), University of Udine, Udine, Italy
2022 - PostDoc Vice-Representative at the Faculty Council, Università della Svizzera Italiana (USI), Lugano, Switzerland
2021 - PostDoc Representative at the Faculty Council, Università della Svizzera Italiana (USI), Lugano, Switzerland
2022 – present Graduate Student (PhD) Advisor, Department of Mathematics, Computer Science and Physics (DMIF), University of Udine, Udine, Italy
2020 – present Graduate Student (PhD) Advisor, Università della Svizzera Italiana (USI), Lugano, Switzerland
2023 External Member of MSc Dissertation Defense Committee; UPFE, Brazil
2023 External Member of PhD Dissertation Defense Committee; University of Luxembourg, Luxembourg

**§ REVIEWING ACTIVITIES (if applicable)**

2022-present – Program Committee Member, 27 International Conferences including the main tracks of GGS tier 1 conferences FSE and ISSTA
2019-present – Reviewer for 12 Journals, including the most impactful venues in Software Engineering, IEEE TSE and ACM TOSEM
2023-present – Distinguished Reviewers Board, ACM Transactions on Software Engineering and Methodology (Scimago rank: Q1)
2022 – PhD Thesis External Reviewer, University of Mondragon, Spain

**§ MEMBERSHIPS OF SCIENTIFIC SOCIETIES**

2022-2023 – Member, Association for Computing Machinery (ACM)
ξ MAJOR COLLABORATIONS (if applicable)

- Paolo Tonella, Software Testing, Università della Svizzera Italiana (USI), Lugano, Switzerland
- Marino Miculan, Software Security, University of Udine, Udine, Italy
- Anna Rita Fasolino, Software Engineering, Università degli Studi di Napoli Federico II, Napoli, Italy
- Alessio Gambi, Autonomous Vehicles, IMC University of Applied Science Krems, Austria
- Andrea Stocco, Software Testing, Technical University of Munich, Munich, Germany
- Gunel Jahangirova, Software Testing, King’s College London, London, UK
PERSONAL INFORMATION

Family name, First name: **Della Monica, Dario**

Researcher unique identifier(s) (such as ORCID, Research ID, etc. ...): orcid.org/0000-0001-9743-665X

Date of birth:

Nationality:

URL for website: https://users.dimi.uniud.it/~dario.dellamonica/

**EDUCATION**

2011 PhD in Computer Science
Department of Mathematics and Computer Science, University of Udine, Italy
Supervisor: Montanari, Angelo

2007 Master in Computer Science
University of Napoli "Federico II", Italy

**CURRENT POSITION(S)**

November 2022 – Current Position: Associate Professor
Department of Mathematics and Computer Science, University of Udine, Italy

**PREVIOUS POSITIONS**

November 2019 – November 2022 Position held: Assistant Professor (tenure track – RTD-B)
Department of Mathematics and Computer Science, University of Udine, Italy

October 2018 – November 2019 Position held: Assistant Professor (RTD-A)
Department of Mathematics and Computer Science, University of Udine, Italy

October 2016 – September 2018 Position held: "INdAM-Marie Curie" Research Fellow at:
Department of Electrical Engineering and Information Technology (DIETI),
University "Federico II" of Naples, Italy

Sección Departamental de Sistemas Informáticos y Computación - Lenguajes y Sistemas informáticos y Ciencia de la Computación e Inteligencia Artificial,
Universidad Complutense de Madrid, Spain

January 2016 – September 2016 Position held: Research Associate
Department of Electrical Engineering and Information Technology (DIETI),
University "Federico II" of Naples, Italy

March 2012 – December 2015 Position held: Research Associate
School of Computer Science, Reykjavik University, Iceland

February 2011 – January 2012 Position held: Research Associate
Department of Computer Science, University of Salerno, Italy

**FELLOWSHIPS AND AWARDS**

- "Marie Curie/INdAM-COFUND” Fellowship. PI of project "Model Rating: Enhancing model checking with information on model distance", INdAM-COFUND Fellowship in Mathematics and/or Applications for experienced researchers, co-founded by "Marie Curie Actions", 2017-2018. Amount of the
grant: ca. 100,000.00 EUR.

- “Marie Curie/rannis” Fellowship. PI of project "Decidability and Expressiveness for Interval Temporal Logics" (project nr. 130802-051), START Postdoctoral Fellowship programme, Rannis, Icelandic Research Fund, co-founded by "Marie Curie Actions", 2013-2015. Amount of the grant: 13,320,000.00 ISK (ca. 107,000.00 EUR - exchange rate: Dec 2nd, 2017).
- PI of the Italian INdAM-GNCS project "Formal methods for combined verification" ("Metodi formali per tecniche di verifica combinata"), 2019. Amount of the grant: 7,000.00 EUR.
- March 2013: Young researcher award for 2011 from University of Udine (Italy) for the paper "Metric Propositional Neighborhood Logics on Natural Numbers" (coauthors: D. Bresolin, A. Montanari, V. Goranko, and G. Sciavicco), Software and Systems Modeling (SoSyM).
- November 2012: GULP prize for the best Italian PhD dissertation in the area of Computational Logic for the years 2010-2011 for the PhD thesis "Expressiveness, decidability, and undecidability of Interval Temporal Logic". GULP is the Italian Association for Logic Programming, affiliated to Association for Logic Programming (ALP).

**§ SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS (if applicable)**

2018 – 2023 supervised 3 master theses
Department of Mathematics and Computer Science, University of Udine, Italy

**§ ORGANISATION OF SCIENTIFIC MEETINGS (if applicable)**

- PC Chair of GandALF 2023, Udine, Italy
- PC Chair of GandALF 2022, Madrid, Spain
- PC Chair of OVERLAY 2021, Padova, Italy
- PC Chair of CILC 2017, Napoli, Italy
- 2 meetings within the 2019 funded INdAM-GNCS project "Formal methods for combined verification" ("Metodi formali per tecniche di verifica combinata"), of which I have been the Principal Investigator

**§ INSTITUTIONAL RESPONSIBILITIES (if applicable)**

2018 – Faculty member, University of Udine, Italy
2019 – PhD Board for the PhD programme in Computer Science and Artificial Intelligence (from 2021) and the one in Computer Science, Mathematics and Physics (until 2021)
More than 15 Master/Bachelor theses supervised
Organizer of around 15 events (international conferences/workshops in Italy and abroad)
Member of the PC of around 40 conferences

**§ REVIEWING ACTIVITIES (if applicable)**

Acted as reviewer for more than 40 conferences and about 20 journals
MAJOR COLLABORATIONS (if applicable)

Several active research collaborations with internationally renowned scientists

PERSONAL INFORMATION
Family name, First name: Alessi Fabio
Researcher unique identifier(s) (such as ORCID, Research ID, etc. ...):
Date of birth: / / 
Nationality:
URL for web site: https://users.dimi.uniud.it/~fabio.alessi/

EDUCATION
1992 PhD Dottorato di Ricerca in Matematica (Consorzio Genova-Milano-Torino-Pavia)
Supervisor: Mariangiola Dezani-Ciancaglini
1986 Master Laurea in Matematica - Genova University

CURRENT POSITION(S)
2005-2024 – Associate Professor at DMIF - Udine University - Italy

PREVIOUS POSITIONS
1993-2005 – Researcher at DMIF - Udine University - Italy

FELLOWSHIPS AND AWARDS

SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS (if applicable)
2005 – 2024 About 40 Master Students at DMIF - Udine University - Udine

ORGANISATION OF SCIENTIFIC MEETINGS (if applicable)

INSTITUTIONAL RESPONSIBILITIES (if applicable)
2017 – 2024 Delegato del Rettore for Music - Udine University - Italy
PERSONAL INFORMATION

Di Gianantonio, Pietro

Researcher unique identifier(s): ORCID: 0000-0002-0638-4610

Date of birth: / / 

Nationality: 

URL for web site: https://users.dimi.uniud.it/~pietro.digianantonio/

ξ EDUCATION

1993 PhD
Department of Computer Science, University of Pisa, Italy

PhD Supervisor: Furio Honsell

1987 Master
Department of Computer Science, University of Pisa, Italy

ξ CURRENT POSITION

2001 – Associate Professor Dpt. of Mathematics, Informatics and Physics, University of Udine, Italy

ξ PREVIOUS POSITIONS

1991 – 2001 Research Assistant Dpt. of Mathematics, Informatics and Physics, University of Udine, Italy

ξ FELLOWSHIPS AND AWARDS

1988 – 1989 CNR -Scholarship, Computing department of Imperial College of Science and Technology, the University of London, UK

ξ SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS (if applicable)

1991 – 2023 14 Master Students, Dpt. of Mathematics, Informatics and Physics, University of Udine, Italy

ξ INSTITUTIONAL RESPONSIBILITIES (if applicable)

2001 – Faculty member, Dpt. of Mathematics, Informatics and Physics, University of Udine, Italy

2016 – 2021 Member of Paritetic Commission, Dpt. of Mathematics, Informatics and Physics, University of Udine

ξ MAJOR COLLABORATIONS (if applicable)

Abbas Edalat Computing department of Imperial College, London, UK

Furio Honsell Dpt. of Mathematics, Informatics and Physics, University of Udine, Italy
Marina Lenisa  Dpt. of Mathematics, Informatics and Physics, University of Udine, Italy

Marino Miculan  Dpt. of Mathematics, Informatics and Physics, University of Udine, Italy
PERSONAL INFORMATION
Family name, First name: Lenisa, Marina
Researcher unique identifier(s) (such as ORCID, Research ID, etc. ...): 0000-0003-0497-0429
Date of birth: - -
Nationality:
URL for web site: https://users.dimi.uniud.it/~marina.lenisa/

ξ EDUCATION
1998 PhD in Computer Science, University of Pisa, Italy
1993 Master in Computer Science, University of Udine, Italy

ξ CURRENT POSITION
2002 – Associate Professor, Department of Computer Science, University of Udine, Italy

ξ PREVIOUS POSITIONS
1998 – 1999 Research Fellow, Laboratory for the Foundations of Computer Science, University of Edinburgh
2000 – 2002 Researcher, Department of Computer Science, University of Udine, Italy
2016 – 2020 Coordinator for Udine University of the BE-OPEN project (Boosting Engagement of Serbian Universities in Open Science) funded under the Erasmus+ Capacity Building in Higher Education action.

ξ FELLOWSHIPS AND AWARDS
1998 – 1999 Research Fellow, Laboratory for the Foundations of Computer Science, University of Edinburgh European Project TMR Linear Logic in Theoretical Computer Science

ξ ORGANISATION OF SCIENTIFIC MEETINGS
2009 Chair of the organizing committee of the conference CALCO’09 (Conference on Algebra and Coalgebra in Computer Science), Udine, Italy, September 2009.
2017 Chair of the organizing committee of the Consortium meeting of BE-OPEN (Boosting Engagement of Serbian Universities in Open Science), September 2017
2019 Chair of the organizing committee of the Consortium meeting of BE-OPEN (Boosting Engagement of Serbian Universities in Open Science), October 2019
INSTITUTIONAL RESPONSIBILITIES

2000 – Faculty member, University of Udine, Italy
2000 – Graduate Student Advisor, University of Udine, Italy
2004 – Erasmus Exchange Programme Delegate for the Bachelor and Master courses in Computer Science, University of Udine, Italy

REVIEWING ACTIVITIES

2000 – Reviewer for more than 50 conference and journal papers
2000 – Member of the Final Committee for about 15 PhD thesis
CURRICULA VITAE UniTN

PERSONAL INFORMATION
Family name, First name: CRISPO Bruno
Researcher unique identifier(s): Scopus ID 8379216600
Date of birth: / / 
Nationality:
URL for web site: https://disi.unitn.it/~crispo/
Bibliometrics: Scopus h-index 34, Scopus citations: 4424

- EDUCATION
  1999 PhD in Computer Security from University of Cambridge, UK  Prof. Roger M. Needham
  1993 Laurea cum laude (Master Degree) in Computer Science, University of Turin, Italy

- CURRENT POSITION
  2018 – present Full Professor, University of Trento, Italy (www.disi.unitn.it)

- PREVIOUS POSITIONS
  2005 – 2018 Associate Professor at the University of Trento, Italy (www.disi.unitn.it)
  2014 – 2015 Full Professor at KU Leuven, Belgium (www.cs.kuleuven.be)
  2005 – 2006 Head of the Security Research Unit at Create-Net Research Centre, Trento, Italy
  2001 – 2002 Managing Director of Cryptomathic Italia SpA, Italy (www.cryptomathic.com)
  2000 Researcher at Stanford Research Institute, UK (www.sri.com)

- FELLOWSHIPS AND AWARDS
  2018 Honorable Mention at the World Wide Web Conference
  2015 Best paper award 3rd International Conference on Future Internet of Things and Cloud (FiCloud) - Special Track on Security, Privacy and Trust
  2006 Best paper award Usenix LISA: 20th Large Installation System Administration Conference
  2005 Best paper award "IEEE Int.I Conference on Service Computing"

- SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS (if applicable)
  2006 – 2023 4 Postdocs/ 18 PhD

- ORGANISATION OF SCIENTIFIC MEETINGS (if applicable)
  2021 Program Chair, Ubisec 2021: 17th International Conference on Ubiquitous Security
  2014 Program Chair PRISM 2014: 3rd Int.I Conference on Privacy and Security in Mobile Systems
  2014 Program Chair, CRiSIS 2013: 8th Int.I Conference on Risks and Security of Internet and Systems
  General Chair, NeCS PhD Winter School (2017, 2018, 2019, 2022, 2023, 2024)
INSTITUTIONAL RESPONSIBILITIES (if applicable)
2016 – present Member of the Executive Council of the National Inter-University Consortium for Informatics (CINI)
2018 – 2021 Coordinator of the IECS International Doctoral School of Trento University
2017 – 2018 Coordinator of the MSc curriculum in Computer Science
2017 – present Local Coordinator of the EIT Digital International MSc in Security and Privacy

REVIEWING ACTIVITIES (if applicable)
2013 – 2021 Associate Editor of the ACM Transactions on Privacy and Security
2011 – 2014 Associate Editor of the Security and Communication Network Journal by Wiley

MEMBERSHIPS OF SCIENTIFIC SOCIETIES (if applicable)
2001 – present Senior Member of IEEE, Member of ACM

MAJOR COLLABORATIONS (if applicable)
Gene Tsudik, UCI Irvine, USA trust technology
Ahmed Reza Sadeghi, TU Darmstadt, German hardware/software security co-design
Mauro Conti, University of Padua, Italy Mobile security
Engin Kirda, Northeastern University, Boston, USA web security
PERSONAL INFORMATION
Family name, First name: GIORGINI Paolo
Researcher unique identifier(s): Scopus id 6603873210
Nationality:
URL for web site: http://www.dit.unitn.it/~pgiorgio/

● EDUCATION
1998 PhD in Computer Science and Engineering Department of Information Engineering, Università Politecnica delle Marche, Italy

● CURRENT POSITION(S)
2019 - present Head of the Department of Information Engineering and Computer Science University of Trento - Italy
2018 - present Full Professor in Computer Science and Engineering Department of Information Engineering and Computer Science, University of Trento - Italy

● PREVIOUS POSITIONS
2011 - 2018 Associate Professor in Computer Science and Engineering Department of Information Engineering and Computer Science, University of Trento - Italy
2002 - 2011 Assistant Professor in Computer Science and Engineering Department of Information Engineering and Computer Science, University of Trento - Italy
1998 - 2002 Postdoctoral Researcher Department of Information Engineering and Computer Science, University of Trento - Italy

● FELLOWSHIPS AND AWARDS
2015 “10 Years Most Influential Paper Award” of the IEEE International Requirements Engineering Conference to Paolo Giorgini, Fabio Massacci, John Mylopoulos and Nicola Zannone for the paper “Modeling security requirements through ownership, permissions and delegation”

● SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS (if applicable)
2009 – 2020 9 PhD

● ORGANISATION OF SCIENTIFIC MEETINGS (if applicable)
2019 - Program Chair 31th International Conference on Advanced Information Systems Engineering (CAiSE)

● INSTITUTIONAL RESPONSIBILITIES (if applicable)
2018 -2019 Head of Industrial Innovation PhD Program
Department of Information Engineering and Computer Science, University of Trento - Italy

2015 - 2018
Head of the international PhD Program on ICT
Department of Information Engineering and Computer Science, University of Trento - Italy

● REVIEWING ACTIVITIES (if applicable)
2007 – present Associate Editor of the International Journal of Agent-oriented Software Engineering

● MAJOR COLLABORATIONS (if applicable)
John Mylopoulos, University of Toronto, Canada, Software Evolution
Fabiano Dalpiaz, Utrecht University, The Netherlands, Requirement Engineering
PERSONAL INFORMATION
Family name, First name: Lizzi Leonardo
Researcher unique identifier(s): ORCID 0000-0002-8369-1681
Date of birth: / / 
Nationality:
URL for web site: https://www.linkedin.com/in/leonardolizzi

● EDUCATION
2011 PhD in Information and Communications Technologies
  Department of Information Engineering and Computer Science, University of Trento, Italy
  PhD Supervisor: Andrea Massa
2007 Master’s degree in Telecommunication Engineering
  Faculty of Telecommunication Engineering, University of Trento, Italy

● CURRENT POSITION(S)
2024 – Associate Professor
  Department of Information Engineering and Computer Science, University of Trento, Italy

● PREVIOUS POSITIONS
2014 – 2023 Maître de Conférences
  Polytech Nice Sophia, Université Côte d'Azur, France
2011 – 2014 Postdoc fellow
  Laboratory of Electronics, Antennas, and Telecommunications, Université Côte d'Azur, France

● FELLOWSHIPS AND AWARDS
2019 EurAAP European School of Antennas (ESoA) best teacher award
2019 PhD Mentoring and Research Award (PEDR), French Ministry of Education, France
2013 1-year LABEX (Laboratory of Excellence) SOPHIA@UCN post-doctoral fellowship
2008 Student paper competition honorable mention for the paper “A time-based approach for the synthesis of antennas for UWB communication systems” at the 2008 IEEE International Symposium on Antennas and Propagation, San Diego, CA, USA, Jul. 5-11, 2008

● SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS (if applicable)
2014 – 2023 13 PhD students, 1 postdoc fellow, 17 master students
  Laboratory of Electronics, Antennas, and Telecommunications, Université Côte d'Azur, France

● ORGANISATION OF SCIENTIFIC MEETINGS (if applicable)
2017 – Coordinator of the Ph.D. School on “Antennas and Rectennas for IoT Applications” in the framework of the European School of Antennas (ESoA). Université Côte d'Azur, France.
2015 – 2017 Steering Committee member at the Assemblée Générale du GDR Ondes, France

● INSTITUTIONAL RESPONSIBILITIES (if applicable)
2015 – 2023 Elected member of the LEAT laboratory council, Université Côte d'Azur, France
2016 – 2023 Coordinator of the “Networks and Communicating Objects” area of the master’s degree in “Industrial Electronic and Computer Science Engineering” of Polytech Nice Sophia, Université Côte d'Azur, France
2017 – 2023 Coordinator of the 4th and 5th years of the master’s degree in “Industrial Electronic and Computer Science Engineering” of Polytech Nice Sophia, Université Côte d'Azur, France

2015 – 2023 Coordinator for Polytech Nice Sophia of the multilateral agreement (AML) for the delivery of double diplomas between France and Italy, Université Côte d'Azur, France

2017 – 2023 Member of the organization committee of the Université Côte d'Azur Academy 1 (RISE - Networks, Information and Digital society) seminars.

- REVIEWING ACTIVITIES (if applicable)
  2020 – Associate editor of IEEE Open Journal of Antennas and Propagation
  2020 – Associate editor of MDPI Electronics
  2017 TPC member of the International Conference on Advanced Technologies for Communication (ATC), October 18-20, 2017, Quynhon city, Vietnam
  2016 TPC member of the 7th EAI International Conference on Sensor Systems and Software, December 1-2, 2016, Nice, France
  2013 TPC member of the 3rd International Conference on Consumer Electronics, Communications and Networks (CECNet 2013), Nov. 20-22, 2013, Xianning, China

- MEMBERSHIPS OF SCIENTIFIC SOCIETIES (if applicable)
  2020 – Senior member of the Institute of Electrical and Electronics Engineers (IEEE).

- MAJOR COLLABORATIONS (if applicable)
  Joseph Costantine, American University of Beirut, Beirut, Lebanon
  Michele Magno, ETH, Zurich, Switzerland
  Lars Jonsson, KTH Royal Institute of Technology, Stockholm, Sweden
  Le Huy Trinh, University of Information and Technology, Ho Chi Minh City, Vietnam
  Antonella D’Orazio and Marco Grande, Polytechnic University of Bari, Bari, Italy
  Manos M. Tentzeris, Georgia Institute of Technology (GeorgiaTech), Atlanta, USA
CURRICULA VITAE UniME

PERSONAL INFORMATION

Family name, First name: Marco Scarpa (M)
Researcher unique identifier(s) (such as ORCID, Research ID, etc. ...): 0000-0002-9560-7504
Nationality:

URL for web site: mdslab.unime.it/mscarpa
https://scholar.google.com/citations?hl=it&user=bZZ2bTYAAAAJ&view_op=list_works&sortby=pubdate

● EDUCATION

Febbraio 1999 - Dottorato in Informatica presso l’Università di Torino, Dipartimento di Informatica, Italia; tesi dal titolo Non-Markovian Stochastic Petri Nets with Concurrent Generally Distributed Transitions
Ottobre 1987/luglio 1994 - Master degree in Ingegneria Informatica conseguita presso l’Università degli Studi di Catania con votazione di 110/110 cum laude

● CURRENT POSITION(S)

Gennaio 2021/oggi - Professore ordinario (S.C. 09/H1 - S.S.D. ING/INF-05) presso il Dipartimento di Ingegneria dell’Università degli Studi di Messina.

● PREVIOUS POSITIONS.

Ottobre 2006/dicembre 2020 - Professore associato (S.C. 09/H1 - S.S.D. ING/INF-05) presso il Dipartimento di Ingegneria dell’Università degli Studi di Messina.
Ottobre 2003/settembre 2006 - Ricercatore a contratto presso il Dipartimento di Matematica dell’Università degli Studi di Messina per svolgere attività sullo studio delle prestazioni di sistemi real time.

● SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS (if applicable)

XXII ciclo - Longo Francesco - Advanced technologies for Information Engineering - Ph.D.
XXXIII ciclo - Chakib Chaouk - Cyber-Physical Systems - Ph.D.
XXXIII ciclo - Murtathurtada Bin Arif Sahbudin - Cyber-Physical Systems - Ph.D.
XXXIX ciclo - Omar Serghini- Dottorato in Ingegneria - Ph.D.

● ORGANISATION OF SCIENTIFIC MEETINGS (if applicable)

2017, Submissions & Registrations Chair; The 16th International Conference on Ad Hoc Networks and Wireless – AdHoc-Now 2017; Messina, Italia, 20-22 September 2017
2023, General Chair; The 19th European Performance Engineering Workshop (EPEW 2023); Florence - 20-23 June, 2023

● INSTITUTIONAL RESPONSIBILITIES (if applicable)


Aprile 2011 / Aprile 2014: membro del Consiglio di Amministrazione del “Consorzio Multi-Ente per la promozione e l’adozione di Tecnologie di calcolo Avanzato” (COMETA) in rappresentanza dell’Università degli Studi di Messina.

2013 - 2018: componente del Direttivo del Centro Informatico di Ateneo (CIAM) dell’Università degli Studi di Messina.


2018 - oggi: membro del Consiglio di Amministrazione del “Consorzio Multi-Ente per la promozione e l’adozione di Tecnologie di calcolo Avanzato” (COMETA) in rappresentanza dell’Università degli Studi di Messina.

Ottobre 2021 - oggi: delegato del Direttore del Dipartimento di Ingegneria all’Internazionalizzazione.

È stato inoltre componente di innumerevoli Commissioni di concorso ricoprendo anche il ruolo di Presidente.

● REVIEWING ACTIVITIES (if applicable)
Editor; International Journal of Distributed Sensor Networks, Taylor & Francis, Inc.

2016, Guest Editor; Performance Evaluation, Elsevier - Special Issue ValueTools 2016
Area editor; EAI Endorsed Transactions on Cloud System (ToCS), European Alliance for Innovation
Advisor board member; Applied Computing and Informatics, Elsevier.

Academic Editor per la rivista "International Journal of Distributed Sensor Networks" SAGE Publishing hosted by Hindawi

2021, Lead editor per lo Special Issue "Models and Techniques to Forecast Consumer Experience on 5G Networks" - Wireless Communications and Mobile Computing; Hindawi

2021, Guest editor per lo Special Issue "Sensor Networks for Dependable Monitoring of Critical Applications" – MDPI Sensors (section "Sensor Networks")

2023, Guest editor per lo Special Issue "Spectrum Sensing for Wireless Communication Systems" – MDPI Sensors (section "Communications")

2023, Guest editor per lo Special Issue “Applications of Cooperative Spectrum Sensing to Cognitive Radio” - Frontiers in Communications and Networks / Frontiers in Signal Processing

● MEMBERSHIPS OF SCIENTIFIC SOCIETIES (if applicable)

2017 – present Membre of Institute of Electrical and Electronics Engineers (IEEE) and of IEEE Computer Society

2017 – 2021 Member of Association for Computing Machinery (ACM)

● MAJOR COLLABORATIONS (if applicable)


Attività di cooperazione tra Università di Messina e Polytechnic University of Hong Kong per le attività inerenti il percorso di studi per il rilascio del titolo doppio in Informatica incardinato sul corso magistrale interclasse Engineering and Computer Science (LM18/LM32) dell’Università degli Studi di Messina. Ruolo: Responsabile.


PERSONAL INFORMATION
Family name, First name: Distefano Salvatore
Researcher unique identifier(s) (such as ORCID, Research ID, etc. ...): 0000-0002-2752-626X
Date of birth: /
Nationality:
URL for web site: https://unime.unifind.cineca.it/individual?uri=http://irises.unime.it/resource/person/6473

EDUCATION
2006 PhD in Information Science and Technology from University of University of Messina
  Topics: System Dependability and Performance: Techniques, Methodologies and Tools
2001 M. Sc. In Computer Engineering University of Catania
  Topics: DB, CAD, Modeling

CURRENT POSITION(S)
2024 – present Full Professor of Computer Science (SSD INF/01) University of Messina Piazza Pugliatti 1, Messina

PREVIOUS POSITIONS
2015-2024 Associate Professor of Computer Engineering (SSD ING-INF/05) University of Messina Piazza Pugliatti 1, Messina
2011-2015 Assistant Professor of Computer Engineering (SSD ING-INF/05) Politecnico di Milano, Piazza Leonardo da Vinci, 32

SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS (if applicable)

ORGANISATION OF SCIENTIFIC MEETINGS (if applicable)
TPC Chair -
  - Chair of the 10th International Conference Advances in Computational Intelligence and Informatics - ICACII 2019
  - International JOINT Conference European Safety and Reliability Conference (ESREL2020) and 15th Probabilistic Safety Assessment and Management Conference (PSAM15) - Track Chair
TPC member -
- IEEE International Conference on Advances in Computing, Communications and Informatics (ICACCI 2015-now)
- International Symposium on Big Data and Cloud Computing Challenges (ISBCC 2016-now)
- URBAN COMPUTING, The International Symposium on Emerging Frontiers of Urban Computing and Smart Cities 2016-now
- IEEE GLOBAL IoT SUMMIT, GloTS, 2017-now
- The IEEE Conference of Open Innovations Association FRUCT, 2015-now
- IEEE International Conference on Smart Computing - SMARTCOMP 2016-now

**INSTITUTIONAL RESPONSIBILITIES (if applicable)**
- Member of “Commissione Paritetica”, University of Messina, MIFT Department, 2015-Now.
- Member of “Commissione Didattica”, University of Messina, Computer Science School, 2016-Now.
- Member of “Commissione Tirocini”, University of Messina, Computer Science School, 2017-Now.
- President of “Presidio di Qualita’”, University of Messina, Computer science and engineering School, 2016-Now.
- Member of “Giunta di Dipartimento MIFT - MIFT Department Board”, University of Messina, MIFT Department, 2016-Now.
- Computing and Information Systems Deputy Chair, MIFT Department, University of Messina, 2016-2019.
- Disable Student Deputy Chair, MIFT Department, University of Messina, 2018-2022.
- CINI - BigData Lab”, University of Messina representative, 2017-Now.
- Member of the “Scientific Board”, Kazan Federal University, Higher Institute for Information Technology and Information Systems, 2016-Now.
- Member of the Scientific Board of the International PhD Programme in Cyber Physical Systems, University of Messina, Department of Engineering, 2017-Now.
- “CINI - BigData Lab”, Management Committee Member, 2018-Now.
- “CINI - Task Force COVID19/IT”, Founder and Coordinator, 2020-Now
- “CINI Working Group System and Service Quality”, Founder and Coordinator, 2021-Now

**REVIEWING ACTIVITIES (if applicable)**

2015-present - Associate Editor of the IEEE Transactions on Dependable and Secure Computing, https://www.computer.org/web/tdsc
2013-present International Journal of Big Data (JoBD), Springer http://www.journalofbigdata.com/
2018-present International Journal of Applied Computing and Informatics, Emerald
https://www.emeraldgrouppublishing.com/journal/aci
2022 - present Frontiers in the Internet of Things, Frontiers Media S.A.
https://www.frontiersin.org/journals/the-internet-of-things
2011-present - Associate Editor of the International Journal of Performability Engineering (IJPE), RAMS Consultant http://www.ijpe-online.com/
- International Journal of Engineering and Industries (IJEI), Advanced Institute of Convergence IT http://www.aicit.org/ijei/home/index.html
- International Journal of Computer Science & Information Technology Applications (IJCSITA) https://sites.google.com/site/ijcsita
PERSONAL INFORMATION
Family name, First name: Longo, Francesco
Researcher unique identifier(s) (such as ORCID, Research ID, etc. ...): 0000-0001-6299-140X
Date of birth: / / 
Nationality:
URL for web site: mdslab.unime.it/flongo

● EDUCATION
2011 PhD in Advanced Techniques for Information Technologies
   University of Messina, Italy
   Prof. Marco Scarpa
2008 M. Sc. in Computer Engineering
   University of Messina, Italy

● CURRENT POSITION(S)
2022 – present Associate Professor
   Department of Engineering, University of Messina, Italy

● PREVIOUS POSITIONS
2019 - 2022 Tenure-track (Senior) Assistant Professor
   Department of Engineering, University of Messina, Italy
2016 - 2019 (Junior) Assistant Professor
   Department of Engineering, University of Messina, Italy

● SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS (if applicable)
2016-present 1 Postdoc student / 2 PhD student / 10 Master Students
   Department of Engineering, University of Messina, Italy

● ORGANISATION OF SCIENTIFIC MEETINGS (if applicable)
2023 TPC co-Chair of “EPEW 2023 - 19th European Performance Engineering Workshop, Florence, Italy, 20-23 June 2023”
2019 TPC co-Chair of “iThings’19 - 12th IEEE International Conference on Internet of Things, Atlanta, U.S.A., 14-17 July 2019”
2017 TPC co-Chair of “AdHoc Now’17 - 16th International Conference on Ad Hoc Networks and Wireless, Messina, Italy, 20-22 September 2017”

● INSTITUTIONAL RESPONSIBILITIES (if applicable)
2022-present Vice-coordinator of the course “Ingegneria Elettronica e Informatica”, Department of Engineering, University of Messina
2021-present Delegate for Internationalization activities of the Department of Engineering, University of Messina
2020-present Faculty advisor for the Zancle E-Drive team of the University of Messina participating in the Formula student competitions in driver-less electric category.

2020-present Scientific responsibility of the agreement between University of Messina and CINI (National Inter-universities Consortium for Informatics) regarding the participation to the Cyberchallenge national competition.

● REVIEWING ACTIVITIES (if applicable)

2021-present Member of the Editorial Board of Sensors, MDPI. ISSN: 1424-8220

2015-present Member of the Editorial Board of International Journal of Distributed Sensor Networks (IJDSN), SAGE Publications. ISSN: 1550-1477

2017-2020 Member of the Editorial Board of Future Generation Computer Systems (FGCS), Elsevier. ISSN: 0167-739X

2019 Guest Editor of Sensors, MDPI, ISSN: 1424-8220, for the special issue “Exploiting the IoT within Cyber Physical Social System”.

2019 Guest Editor of Transactions on Internet Technology (TOIT), ACM, ISSN: 1533-5399, for the special issue “Fog, Edge, and Cloud Integration for Smart Environments”.

● MEMBERSHIPS OF SCIENTIFIC SOCIETIES (if applicable)

2019 – present Member of Association for Computing Machinery (ACM)

2017 – present Membre of Institute of Electrical and Electronics Engineers (IEEE) and of IEEE Computer Society

● MAJOR COLLABORATIONS (if applicable)

Prof. Kishor Trivedi (Duke University, U.S.A)
Dr. Eliot Salant (IBM Research Haifa, Israel)
Prof. Stefano Russo (Università degli Studi di Napoli, Italy)
Prof. Yaron Wolfsthal (Ben-Gurion University of the Negev, Israel)
Dr. Andreas Metzger (University of Duisburg Essen, Germany)
Prof. Adnan Al-Anbuky (Auckland University of Technology, New Zealand)
Prof. Rajkumar Buyya (University of Melbourne, U.S.A).
Prof. Omer Rana (University of Cardiff, UK)
Prof. O.P. Vyas (IIIT- AllaHabab, India)
Prof. Asaf Shabtai (Ben-Gurion University of the Negev, Israel)
Prof. Michele Colaianni (University of Modena and Reggio Emilia, Italy)
Prof. Enzo Mingozzi (Università di Pisa, Italy)
PERSONAL INFORMATION
Bruno Dario
https://orcid.org/0000-0002-6080-9077

Date of birth: /
Nationality: 
URL for website: https://unime.unifind.cineca.it/get/person/025100

● EDUCATION


● CURRENT POSITION(S)

2016 Associate Professor. University of Messina. Department of Engineering

● PREVIOUS POSITIONS

2006 – 2016 Assistant Professor. University of Messina. Department of Engineering

● SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS (if applicable)

2006 – 2023 4 PhD Students, 1 Post-doc, 30+ Master students University of Messina

● ORGANISATION OF SCIENTIFIC MEETINGS (if applicable)

Demo & Poster co-chair - Ninth International conference on Smart Computing (IEEE SmartComp), Nashville, Tennessee (USA), giugno 2023
General co-chair - Ninth IEEE International Workshop on Sensors and Smart Cities, Nashville, Tennessee (USA), giugno 2023
General co-chair - Eighth IEEE International Workshop on Sensors and Smart Cities, Espoo (Finland), giugno 2022
Program co-chair - Seventh IEEE International Workshop on Sensors and Smart Cities, Irvine CA (USA), agosto 2021
Workshop co-chair - Seventh IEEE International conference on Smart Computing (IEEE SmartComp), Irvine CA (USA), agosto 2021
Program co-chair - Sixth IEEE International Workshop on Sensors and Smart Cities, Bologna, giugno 2020
Workshop co-chair - Sixth IEEE International conference on Smart Computing (IEEE SmartComp), Bologna, giugno 2020
Program co-chair - Fifth IEEE International Workshop on Sensors and Smart Cities, Washington (USA), maggio 2019
Workshop co-chair - Fifth IEEE International conference on Smart Computing (IEEE SmartComp),
Washington (USA), maggio 2019
Program co-chair - Fourth IEEE International Workshop on Sensors and Smart Cities, Taormina (Messina), giugno 2018
Workshop co-chair - Fourth IEEE International conference on Smart Computing (IEEE SmartComp), Taormina (Messina), giugno 2018
Program co-chair - 16th International Conference on Ad Hoc Networks and Wireless – AdHoc-Now 2017 - Messina, settembre 2017
Program co-chair - Third IEEE International Workshop on Sensors and Smart Cities, Hong Kong (China), maggio 2017
WIP/Demo co-chair - Third IEEE International conference on Smart Computing (IEEE SmartComp), Hong Kong (China), maggio 2017
Program co-chair - Second IEEE International Workshop on Sensors and Smart Cities - Saint Louis, Missouri (USA), maggio 2016
Local chair - 10th EAI International Conference on Performance Evaluation Methodologies and Tools (ValueTools ’16) - Taormina (Messina), ottobre 2016
Program co-chair - Second IEEE International Workshop on Sensors and Smart Cities - Saint Louis, Missouri (USA), maggio 2016
Local co-chair - Fourth European Conference on Service-Oriented and Cloud Computing (ESOCC ’15) - Taormina (Messina), settembre 2015
Program co-chair - First IEEE International Workshop on Sensors and Smart Cities - Hong Kong, novembre 2014

- INSTITUTIONAL RESPONSIBILITIES (if applicable)

19/03/21 è stato nominato Coordinatore del Corso Laurea Magistrale in Ingegneria e Scienze Informatiche (LM-32/LM-18) - Dipartimento di Ingegneria - Università di Messina, per il triennio 2021-2024.

23/04/20 è stato nominato Vice-Coordinatore del Corso Laurea in Ingegneria Elettronica e Informatica (L-8) - Dipartimento di Ingegneria - Università di Messina. Rimane in carica fino al marzo 2021.

2023 È stato nominato dal Prorettore alla Ricerca dell’Università di Messina referente di Ateneo per il coordinamento delle attività progettuali legate al PNRR - Partenariati Estesi - Linea 1 - Intelligenza Artificiale: Aspetti Fondazionali

27/04/2022 è stato designato dal Senato Accademico dell’Università di Messina, quale componente del Comitato scientifico del Centro Messina University Press, per un triennio.

18/06/20 è stato designato dal Consiglio di Amministrazione dell’Università di Messina quale rappresentante dell'Ateneo di Messina, all'interno del Comitato Tecnico Scientifico del Consorzio COMETA

2019 È stato nominato, dal Direttore del Dipartimento di Ingegneria dell’Università di Messina, Delegato per la Pianificazione e Ottimizzazione dei Servizi Informatici del Dipartimento per il triennio 2019/2021.

È Referente di nodo del Laboratorio Nazionale del CINI su “Artificial Intelligence and Intelligent Systems” per l’Università di Messina.

È Referente di nodo del Laboratorio Nazionale del CINI su “Embedded Systems & Smart Manufacturing” per l’Università di Messina.
● REVIEWING ACTIVITIES (if applicable)

Editorial board member - "Wireless Communications and Mobile Computing" - Wiley -. ISSN: 1530-8669
Guest editor - special issue “Sensors and Smart Cities” della rivista MDPI Sensors ISSN 1424-8220
Guest editor - special issue “Sensors and Smart Cities” della rivista MDPI Computers ISSN 2073-431X

● MEMBERSHIPS OF SCIENTIFIC SOCIETIES (if applicable)

2018 IEEE Senior Member

● MAJOR COLLABORATIONS (if applicable)

Duke University (USA) - Prof. Kishor Trivedi
UC Berkeley (USA) - Prof. Randy Katz
IIIT- AllaHabad (India) - Prof. O.P. Vyas
Department of Computing, Hong Kong Polytechnic University (Hong Kong) - Prof. Jiannong Cao
National Technical University of Athens (Greece) - Prof. Symeon Papavassiliou
University of Duisburg Essen (Germany) - Dr. Andreas Metzger
Technion Israel Institute of Technology (Israel) - Prof. Avi Miron
IBM Research Haifa (Israel) - Dr. Eliot Salant
Auckland University of Technology (New Zealand) - Prof. Adnan Al-Anbuky
Missouri University of Science and Technology (USA) - Prof. Sajal K. Das
PERSONAL INFORMATION

Family name, First name: Merlino, Giovanni
Researcher unique identifier(s): 0000-0002-1469-7860 (ORCID), I-3169-2019 (ResearcherID)
Date of birth: / /
Nationality:
URL for web site: https://unime.unifind.cineca.it/resource/person/30098

● EDUCATION

2016 PhD in Computer and Telecommunications Engineering
   Department of Electrical Electronic and Computer Engineering, University of Catania, Italy
   Vincenza Carchiolo
2011 Master of Science in Electrical Engineering Department of Engineering, University of Messina, Italy

● CURRENT POSITION(S)

2023 – Associate Professor (tenured) Department of Engineering, University of Messina, Italy

● PREVIOUS POSITIONS

2020 – 2023 Tenure-track Assistant Professor Department of Engineering, University of Messina, Italy
2018 – 2020 Technical staff (permanent) Centre on Information Technologies, University of Messina, Italy

● FELLOWSHIPS AND AWARDS

2020 Outstanding Paper Award for “A Stack4Things-based Web of Things Architecture” at the 13th IEEE International Conference on Internet of Things (iThings 2020), IEEE, Greece
2015 – 2018 Research fellow (H2020 project BEACON - Enabling Federated Cloud Networking)
   Department of Engineering, University of Messina, Italy
2019 Best Paper Award for “Authorization Transparency for Accountable Access to IoT Services” at the IEEE 2019 International Congress on Internet of Things (ICIOT 2019), IEEE, Italy
2017 Best Paper Award for “Pushing Intelligence to the Edge with a Stream Processing Architecture” at the 10th IEEE International Conference on Internet of Things (iThings 2017), IEEE, UK

● SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

2018 – Supervision/co-supervision of current/former PhDs: 6
   Department of Engineering, University of Messina, Italy

● ORGANISATION OF SCIENTIFIC MEETINGS

2017 Workshop Chair, IEEE Intl. Conf. on Smart Computing (SMARTCOMP) - 1st International Workshop on Federated Networking, Clouds and IoT (FeNCI), Hong Kong, China
2016 Publicity Chair, IEEE Intl. Conf. on Smart Computing (SMARTCOMP) - 2nd IEEE International
Workshop on Sensors and Smart Cities (SSC), St. Louis (MO), USA
2023 TPC Member,Intl. Conf. on Smart Computing (SMARTCOMP) - 8th Intl. Workshop on Smart Service Systems (SmartSys), Nashville, USA
2023 TPC Member, Intl. Conf. on Smart Computing (SMARTCOMP) - 9th Intl. Workshop on Sensors and Smart Cities (SSC), Nashville, USA
2022 TPC Member, 21st IEEE Intl. Symposium on Network Computing and Applications (NCA), online
2022 TPC Member, Intl. Conf. on Smart Computing (SMARTCOMP) - 7th Intl. Workshop on Smart Service Systems (SmartSys), Aalto, Finland
2022 TPC Member, Intl. Conf. on Smart Computing (SMARTCOMP) - 8th Intl. Workshop on Sensors and Smart Cities (SSC), online
2021 TPC Member, 14th IEEE Intl. Conf. on Internet of Things (iThings), Melbourne, Australia
2021 TPC Member, 10th IEEE Intl. Conf. on Cloud Networking (CloudNet), online
2021 TPC Member, 20th IEEE Intl. Symposium on Network Computing and Applications (NCA), online
2021 TPC Member, Intl. Conf. on Smart Computing (SMARTCOMP) - 7th Intl. Workshop on Sensors and Smart Cities (SSC), online
2020 TPC Member, 13th IEEE Intl. Conf. on Internet of Things (iThings), online
2020 TPC Member, 2020 IEEE Intl. Conf. on Smart Data Services (SmartDataServices), online
2020 TPC Member, 2020 IEEE World Congress on Services (SERVICES), online, 2020
2020 TPC Member, 2020 IEEE Intl. Conf. on Services Computing (SCC), online
2020 TPC Member, 19th IEEE Intl. Symposium on Network Computing and Applications (NCA), online
2020 TPC Member, Intl. Conf. on Smart Computing (SMARTCOMP) - 6th Intl. Workshop on Sensors and Smart Cities (SSC), online
2019 TPC Member, 12th IEEE Intl. Conf. on Internet of Things (iThings), Atlanta (GA), USA
2019 TPC Member, 7th Intl. Conf. on Future Internet of Things and Cloud (FiCloud), Istanbul, Turkey
2019 TPC Member, 18th IEEE Intl. Symposium on Network Computing and Applications (NCA), Cambridge (MA), USA
2019 TPC Member, Intl. Conf. on Smart Computing (SMARTCOMP) - 5th Intl. Workshop on Sensors and Smart Cities (SSC), Washington (D.C.), USA
2019 TPC Member, 2019 IEEE Intl. Congress on Internet of Things (ICIOT), Milan, Italy
2018 TPC Member, 2018 IEEE Intl. Congress on Internet of Things (ICIOT), San Francisco (CA), USA
2018 TPC Member, Intl. Conf. on Smart Computing (SMARTCOMP) - 4th Intl. Workshop on Sensors and Smart Cities (SSC), Taormina, Italy
2015 TPC Member, European Conf. on Service-Oriented and Cloud Computing (ESOCC) - Workshop on Federated Cloud Networking (FedCloudNet), Taormina, Italy
2015 TPC Member, 4th European Conf. on Service-Oriented and Cloud Computing (ESOCC) - 2nd Workshop on Seamless Adaptive Multi-cloud Management of Service-based Applications (SEAWAVE), Taormina, Italy
2015 TPC Member, IEEE Intl. Symposium on a World of Wireless, Mobile and Multimedia Networks (WoWMoM) - 4th Workshop on the IoT: Smart Objects and Services (IoT-SoS), Boston (MA), USA
2014 TPC Member, Intl. Conf. on Smart Computing (SMARTCOMP) - 1st Intl. Workshop on Sensors and Smart Cities (SSC), Hong Kong, China

- INSTITUTIONAL RESPONSIBILITIES
2023 – Deputy Head of the M.D. course in “Engineering and Computer Science”, Department of Engineering, University of Messina, Italy
2022 – 2023 National Secretary, Association of Fixed-Term/Tenure-Track Researchers (ARTeD), Italy
2021 – Delegate for ICT services, Department of Engineering, University of Messina, Italy
2021 – Member of the Scientific Board of the Ph.D. program in “Bioengineering applied to the Medical Sciences”, Department of Engineering, University of Messina, Italy
2021 – Head of International programs for the M.D. course in “Engineering and Computer Science”, Department of Engineering, University of Messina, Italy
2021 – 2023 Head of Guidance and Tutoring for the B.D. course in “Biomedical Engineering”, Department of Engineering, University of Messina, Italy

● REVIEWING ACTIVITIES

2020 – Editorial Board, MDPI IoT (ISSN: 2624-831X)
2019 – Editorial Board, Technical Committee Member, Elsevier Computer Communications (ISSN: 0140-3664)
2019 – 2023 Editorial Board, Associate, IEEE Access (ISSN: 2169-3536)
2013 – Reviewer,
• ACM Tran. on Internet Technology
• IEEE Tran. on Parallel and Distributed System (TPDS)
• IEEE Tran. on Dependable and Secure Computing (TDSC)
• IEEE Tran. on Services Computing (TSC)
• IEEE Communications Letters
• IEEE Systems Journal
• Elsevier Future Generation Computer Systems
• Elsevier Pervasive and Mobile Computing
• Scalable Computing: Practice and Experience, Univ. de Vest
• Mobile Information Systems, Hindawi
• Wireless Communications and Mobile Computing, Hindawi
2018 – Scientific Evaluation, Croatian Science Foundation (HRZZ), Croatia

● MEMBERSHIPS OF SCIENTIFIC SOCIETIES

2020 – Member, Research Network “SLICES”
2012 – Member, Computer Society, IEEE, USA

● MAJOR COLLABORATIONS

Om Prakash Vyas, Trustless sensing and Semantic activity recognition, Department of IT, IIIT - Allahabad, India
Enzo Mingozzi, Container migration in Fog computing, Department of Information Engineering, University of Pisa, Italy
Anna Levin, Federated Cloud networking, IBM Research Labs Haifa, Israel
Symeon Papavassiliou, Mobile Crowdsensing, School of Electrical and Computer Engineering, National Technical University, Greece
Rafael Asorey Cacheda, Long Range WAN roaming, Department of Technologies for Information and Communications, Polytechnic University of Cartagena, Spain
Andrea Passarella, Distributed and Federated Infrastructures for Research, IIT, CNR, Italy
Adnan Al-Anbuky, Smart City IoT infrastructure, Auckland University, New Zealand
Appendix: All current grants and on-going and submitted grant applications of the PI and Co-PI

Current grant of PI

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Funding source</th>
<th>Amount (Euros)</th>
<th>Period</th>
<th>Role of the PI</th>
<th>Relation to current proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLICES-PP</td>
<td>EU</td>
<td>3000K€</td>
<td>Sept 2022-Aug 2026</td>
<td>Coordinator Italian node</td>
<td>Research Infrastructure that could be used to exploit project results</td>
</tr>
<tr>
<td>Joule</td>
<td>Italian MUR</td>
<td>320K€</td>
<td>Oct 2023-Sept 2025</td>
<td>Coordinator UniMe</td>
<td>Cloud-to-Edge continuum</td>
</tr>
<tr>
<td>Agreed</td>
<td>PON-Gov</td>
<td>591K€</td>
<td>Oct 2022-March 2023</td>
<td>Coordinator CINI</td>
<td>Platform development</td>
</tr>
</tbody>
</table>

Current grant of co-PI

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Funding source</th>
<th>Amount (Euros)</th>
<th>Period</th>
<th>Role of the Co-PI</th>
<th>Relation to current proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>UPSIDE</td>
<td>MIMIT</td>
<td>641.000,00 €</td>
<td>Oct 23-Oct24</td>
<td>Coordinator</td>
<td>Threat Modeling methodologies and Cybersecurity assessment for Complex Infrastructures</td>
</tr>
<tr>
<td>RASTA</td>
<td>MISE</td>
<td>1.110.000€</td>
<td>Nov 22-Jun25</td>
<td>Member</td>
<td>None</td>
</tr>
<tr>
<td>MicroCyber</td>
<td>EU</td>
<td>356.042,50</td>
<td>Oct 22-Oct 25</td>
<td>Member</td>
<td>Cybersecurity assessment</td>
</tr>
<tr>
<td>DEFEDGE</td>
<td>Italian MUR</td>
<td>70730 €</td>
<td>Dec 23-Dec 25</td>
<td>Unit Coordinator</td>
<td>Cloud-Edge Threat modeling and Penetration testing</td>
</tr>
</tbody>
</table>