# Michele Ianni – Résumé

Date of Birth Nationality  $23^{rd}$  January 1989

Italian

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# Education

2014 - 2018 Dottorato di Ricerca in Information and Communication Technologies

Dipartimento di Ingegneria Informatica, Modellistica, Elettronica e Sistemistica - DIMES

Università della Calabria

**2016 - 2017** Visiting PhD Student

SecLab Computer Security Group University of California, Santa Barbara

2012 - 2014 Laurea Magistrale in Ingegneria Informatica

Università della Calabria

2008 - 2011 Laurea Triennale in Ingegneria Informatica

Università della Calabria

2003 - 2008 Diploma Liceo Scientifico

Liceo Scientifico Filolao - Crotone, Italy

# Certifications, Masters

2013 - 2014 Esperto nella progettazione, configurazione, gestione e testing delle reti

Corso di formazione - Progetto PON01\_01795-I CONTACT

Università della Calabria

2015 International Summer School on Information Security, InfoSec 2015

Bilbao, Spain

2021 Bestr Badge Software Security Advanced

Consorzio Interuniversitario Nazionale per l'Informatica - CINI

2021 Bestr Badge Cryptography Advanced

Consorzio Interuniversitario Nazionale per l'Informatica - CINI

# **Employment History**

1/1/2022 Università della Calabria

Present Ricercatore a Tempo Determinato (RTD A)

Cybersecurity - Metodi e tecniche avanzate per la sicurezza e privacy in sistemi e applicazioni

emergenti per l'IoT

March 2023 Università della Calabria

June 2023 Instructor per corsi di addestramento

Cyber Challenge 2023

27/2/2023 Instituto Superior Técnico, University of Lisbon

3/2/2023 Invited Professor

PhD Course "Binary Analysis and Exploitation"

March 2022 Università della Calabria

June 2022 Instructor per corsi di addestramento

Cyber Challenge 2022

December 2021 Open Knowledge Technologies

Collaborazione di ricerca

Definizione, progettazione e sviluppo di un modello per la certificazione di originalità nel processo di gestione dei diritti d'autore e di una soluzione prototipale per la gestione sicura

di processi inerenti il diritto d'autore

18/10/2021 Università di Verona 31/12/2021 Borsista di Ricerca

"Analisi dinamica per la similarità di codice binario"

15/10/2019 Università di Verona

15/10/2021 Assegnista di Ricerca, S.S.D. INF/01

"Analisi e sviluppo di tecniche di protezione di codice C e PLC basate su offuscamento"

March 2021 Università della Calabria

June 2021 Instructor per corsi di addestramento

Cyber Challenge 2021

December 2020 Sirfin

Docente Malware Analysis, Binary Exploitation

CyberSecurity course, 2020

2018 Procura della Repubblica

2020 Consulente

Analisi forense informatica

March 2020 Università della Calabria

June 2020 Instructor per corsi di addestramento

Cyber Challenge 2020

1/2/2018 DIMES - Università della Calabria

14/10/2019 Assegnista di Ricerca, S.S.D. ING-INF/05

"Metodologie e tecnologie innovative per la progettazione e lo sviluppo di infrastrutture per l'accountability di servizi cooperativi, anche basati su infrastrutture blockchain"

October 2019 NTT Data - Artémat

Docente Software Engineering, Operating Systems NTT Data - Talent Camp Java, Cosenza, 2019

March 2019 Università della Calabria

June 2019 Instructor per corsi di addestramento

Cyber Challenge 2019

**2018 - 2019** Coremuniti srl

Analisi delle criticità e degli aspetti relativi alla sicurezza dei servizi basati sull'identità digitale (Individuazione dei casi di uso, analisi delle problematiche di sicurezza) SPID Advanced

Security - SPIDASEC

27/11/2017 ICAR CNR - Istituto di Calcolo e Reti ad Alte Prestazioni, National Research Council

26/1/2018 Utilizzo di Trusted Execution Environments per il Volunteer Computing

**2014 - 2018** GreenDEA srl

Research and Development

20/10/2014 ICAR CNR - Istituto di Calcolo e Reti ad Alte Prestazioni, National Research Council

25/1/2015 Assegnista di Ricerca, Programma di ricerca PAC02L1\_00269 VI-POC

**2012 - 2013** Area51 Publishing

Author of LAMP series of books

#### Courses

- Programming GPUs with CUDA, Manuel Ujaldon
- Cryptography I, Dan Boneh, Stanford University, Coursera
- Software Security, Michael Hicks, University of Maryland, College Park. Coursera
- 3D rendering with Blender
- Wireless and mobile networks, Pietro Manzoni, University of Valencia
- C programming
- Many courses on OpenSecurityTraining, SecurityTube etc

## Presentations and Seminars

- Binary Analysis and Exploitation, Corso di Alta Formazione in Sicurezza delle Informazioni, Distretto Cyber Security Poste Italiane, 2023, Cosenza, Italy
- Protecting Your Code: Navigating the Landscape of Software Security, Invited Talk, Faculty of Sciences of the University of Lisbon (FCUL), 2023, Lisbon, Portugal
- Neural Network based Temporal Point Processes for Attack Detection in Industrial Control Systems, 2022 IEEE International Conference on Cyber Security and Resilience, IEEE CSR 2022, Virtual Conference
- Some Experiments on High Performance Anomaly Detection, 30th Euromicro International Conference on Parallel, Distributed and Network-Based Processing, PDP 2022, Valladolid, Spain
- Activity Daily Living prediction with Marked Temporal Point Processes, 29th Italian Symposium on Advanced Database Systems, SEBD 2021, Pizzo Calabro, Italy
- Some experiments on activity outlier detection, 29th Italian Symposium on Advanced Database Systems, SEBD 2021, Pizzo Calabro, Italy
- A compact encoding of security logs for high performance activity detection, 29th Euromicro International Conference on Parallel, Distributed and Network-Based Processing, PDP 2021, Valladolid, Spain
- Detection and Counter-attacks in A&D Capture The Flag competitions, Series of 2 invited seminars, DIMES Università della Calabria, 2020, Rende, Italy
- Introduction to Binary Exploitation, Cyb3r S3cuR1ty.exe workshop, 2019, Rende, Italy
- Binary Analysis and Exploitation, Corso di Alta Formazione in Sicurezza delle Informazioni, Distretto Cyber Security Poste Italiane, 2018, Cosenza, Italy
- High Performance Computing by the Crowd, 23rd International Symposium on Methodologies for Intelligent Systems, ISMIS 2017, Warsaw, Poland
- Hierarchical Big Data Clustering, 23rd Italian Symposium on Advanced Database Systems, SEBD 2015, Gaeta, Italy
- Java RT Managed Code Rootkits in practice, Hackmeeting 2013

#### Honours and awards

- Best student paper award for the paper: "Explaining Binary Obfuscation" 3rd International Conference on Cyber Security and Resilience IEEE CSR 2023
- Best poster award candidate for the paper: "An overview of the endless battle between virus writers and detectors: how compilers can be used as an evasion technique" DATA 2019
- Best paper award candidate for the paper: "Clustering Big Data" DATA 2018
- Menzione d'onore finali nazionali Olimpiadi di Matematica
- Pucciarelli D'Afflitto Award
- Iannuzzi Award

# Teaching

- Binary Analysis and Exploitation, 12 ore, Invited PhD Course Instituto Superior Técnico, University of Lisbon, 2023
- Binary Analysis with Applications to Machine and Deep Learning, 12 ore, Corso di Dottorato in Information and Communication Technologies, DIMES Università della Calabria, 2023
- Binary Analysis with Applications to Machine and Deep Learning, Michele Ianni and prof.ssa Antonella Guzzo, 12 ore, Corso di Dottorato in Information and Communication Technologies, DIMES Università della Calabria, 2022
- Data Security, Docente, 34 ore, 6 CFU, Laurea Magistrale in Ingegneria Informatica, Università della Calabria, 2023/2024
- *IOT Security*, Docente, 15 ore, 6 CFU, Laurea Magistrale in Telecommunication Engineering: Smart Sensing, Computing And Networking, Università della Calabria, 2023/2024
- IOT Security, Docente, 15 ore, 6 CFU, Laurea Magistrale in Telecommunication Engineering: Smart Sensing, Computing And Networking, Università della Calabria, 2022/2023
- Laboratorio Informatico di Base, Docente, 21 ore, 3 CFU, Laurea Triennale in Economia Aziendale, Università della Calabria, 2021/2022
- Data Security, Esercitatore, 16 ore, 6 CFU, Laurea Magistrale in Ingegneria Informatica, Università della Calabria, 2023/2024
- Fondamenti di Informatica, Esercitatore, 13 ore, 9 CFU, Laurea Triennale in Ingegneria Gestionale, Università della Calabria, 2022/2023
- Metodi e Strumenti per la Sicurezza Informatica, Esercitatore, 16 ore, 6 CFU, Laurea Magistrale in Ingegneria Informatica, Università della Calabria, 2022/2023
- *IOT Security*, Esercitatore, 16 ore, 6 CFU, Laurea Magistrale in Telecommunication Engineering: Smart Sensing, Computing And Networking, Università della Calabria, 2022/2023
- Fondamenti di Informatica, Esercitatore, 13 ore, 9 CFU, Laurea Triennale in Ingegneria Gestionale, Università della Calabria, 2021/2022
- Metodi e Strumenti per la Sicurezza Informatica, Esercitatore, 16 ore, 6 CFU, Laurea Magistrale in Ingegneria Informatica, Università della Calabria, 2021/2022
- IOT Security, Esercitatore, 16 ore, 6 CFU, Laurea Magistrale in Computer Engineering for the Internet of Things, Università della Calabria, 2021/2022
- Fondamenti di Informatica, Esercitatore, 15 ore, 6 CFU, Laurea Triennale in Ingegneria Gestionale, Università della Calabria, 2020/2021
- Metodi e Strumenti per la Sicurezza Informatica, Esercitatore, 16 ore, 6 CFU, Laurea Magistrale in Ingegneria Informatica, Università della Calabria, 2020/2021
- Ambienti di Programmazione per il Software di base, Esercitatore, 21 ore, 6 CFU, Laurea Triennale in Ingegneria Informatica, Università della Calabria, 2020/2021
- Metodi e Strumenti per la Sicurezza Informatica, Esercitatore, 16 ore, 6 CFU, Laurea Magistrale in Ingegneria Informatica, Università della Calabria, 2019/2020
- Fondamenti di Informatica, Esercitatore, 15 ore, 6 CFU, Laurea Triennale in Ingegneria Gestionale, Università della Calabria, 2019/2020

- Ambienti di Programmazione per il Software di base, Esercitatore, 21 ore, 6 CFU, Laurea Triennale in Ingegneria Informatica, Università della Calabria, 2019/2020
- Metodi e Strumenti per la Sicurezza Informatica, Esercitatore, 16 ore, 6 CFU, Laurea Magistrale in Ingegneria Informatica, Università della Calabria, 2018/2019
- Fondamenti di Informatica, Esercitatore, 15 ore, 6 CFU, Laurea Triennale in Ingegneria Gestionale, Università della Calabria, 2018/2019
- Ambienti di Programmazione per il Software di base, Esercitatore, 21 ore, 6 CFU, Laurea Triennale in Ingegneria Informatica, Università della Calabria, 2018/2019
- Fondamenti di Informatica, Esercitatore, 15 ore, 6 CFU, Laurea Triennale in Ingegneria Gestionale, Università della Calabria, 2017/2018
- Ambienti di Programmazione per il Software di base, Esercitatore, 21 ore, 6 CFU, Laurea Triennale in Ingegneria Informatica, Università della Calabria, 2017/2018
- Informatica Teorica e Linguaggi Formali: Modulo 2, Linguaggi Formali, Esercitatore, 7 ore, 6 CFU, Laurea Magistrale in Ingegneria Informatica, Università della Calabria, 2015/2016
- Laboratorio di Algoritmi e Gestione Dati, Laboratorio, 25 ore, 6 CFU, Laurea Triennale in Ingegneria Informatica, Università della Calabria, 2015/2016
- Attività seminariale per l'insegnamento di Crittografia, Laurea Magistrale in Ingegneria Informatica, Università della Calabria, 2018/2019
- Attività seminariale per l'insegnamento di Metodi e Strumenti per la Sicurezza Informatica, Laurea Magistrale in Ingegneria Informatica, Università della Calabria, 2017/2018
- Attività seminariale per l'insegnamento di Crittografia, Laurea Magistrale in Ingegneria Informatica, Università della Calabria, 2017/2018
- Attività seminariale per l'insegnamento di *Crittografia*, Laurea Magistrale in Ingegneria Informatica, Università della Calabria, 2015/2016

### **Publications**

- Giancarlo Fortino, Claudia Greco, Antonella Guzzo, and Michele Ianni. Sigil: A signature-based approach of malware detection on intermediate language. In *Computer Security. ESORICS 2023 International Workshops*, pages 256–266, Cham, 2024. Springer Nature Switzerland
- Usman Tahir, Fiza Siyal, Michele Ianni, Antonella Guzzo, and Giancarlo Fortino. Exploiting byte-code analysis for reentrancy vulnerability detection in ethereum smart contracts. In 2023 IEEE Intl Conf on Dependable, Autonomic and Secure Computing, Intl Conf on Pervasive Intelligence and Computing, Intl Conf on Cloud and Big Data Computing, Intl Conf on Cyber Science and Technology Congress (DASC/PiCom/CBDCom/CyberSciTech), pages 0779–0783, Nov 2023
- Giuseppe Beltrano, Claudia Greco, Michele Ianni, and Giancarlo Fortino. Deep learning-based detection of csrf vulnerabilities in web applications. In 2023 IEEE Intl Conf on Dependable, Autonomic and Secure Computing, Intl Conf on Pervasive Intelligence and Computing, Intl Conf on Cloud and Big Data Computing, Intl Conf on Cyber Science and Technology Congress (DASC/PiCom/CBDCom/CyberSciTech), pages 0916–0920, Nov 2023
- Claudia Greco, Michele Ianni, Antonella Guzzo, and Giancarlo Fortino. Firmware Dynamic Analysis Through Rewriting, pages 19–33. Springer Nature Switzerland, Cham, 2024
- Pian Qi, Diletta Chiaro, Antonella Guzzo, Michele Ianni, Giancarlo Fortino, and Francesco Piccialli.
  Model aggregation techniques in federated learning: A comprehensive survey. Future Generation Computer Systems, 2023

- Sakib Anwar Rieyan, Md. Raisul Kabir News, A.B.M. Muntasir Rahman, Sadia Afrin Khan, Sultan Tasneem Jawad Zaarif, Md. Golam Rabiul Alam, Mohammad Mehedi Hassan, Michele Ianni, and Giancarlo Fortino. An advanced data fabric architecture leveraging homomorphic encryption and federated learning. *Information Fusion*, page 102004, 2023
- Rabeya Khatun Muna, Muhammad Iqbal Hossain, Md. Golam Rabiul Alam, Mohammad Mehedi Hassan, Michele Ianni, and Giancarlo Fortino. Demystifying machine learning models of massive iot attack detection with explainable ai for sustainable and secure future smart cities. *Internet of Things*, page 100919, 2023
- Claudia Greco, Michele Ianni, Antonella Guzzo, and Giancarlo Fortino. Explaining binary obfuscation. In 2023 IEEE International Conference on Cyber Security and Resilience (CSR), pages 22–27, July 2023
- Mila Dalla Preda and Michele Ianni. Exploiting number theory for dynamic software watermarking.
  Journal of Computer Virology and Hacking Techniques, Jul 2023
- Jiahui Chen, Hang Xiao, Yushan Zheng, Mohammad Mehedi Hassan, Michele Ianni, Antonella Guzzo, and Giancarlo Fortino. Dksm: A decentralized kerberos secure service-management protocol for internet of things. *Internet of Things*, page 100871, 2023
- Michele Ianni and Elio Masciari. Scout: Security by computing outliers on activity logs. *Computers & Security*, 132:103355, 2023
- Diletta Chiaro, Edoardo Prezioso, Michele Ianni, and Fabio Giampaolo. Fl-enhance: A federated learning framework for balancing non-iid data with augmented and shared compressed samples. Information Fusion, 98:101836, 2023
- Antonino Rullo, Michele Ianni, and Edoardo Serra. Security and privacy for the internet of things. Frontiers in Computer Science, 5:1173296, 2023
- Giancarlo Fortino, Claudia Greco, Antonella Guzzo, and Michele Ianni. Enabling faster security assessment of re-hosted firmware. In 2022 IEEE Intl Conf on Dependable, Autonomic and Secure Computing, Intl Conf on Pervasive Intelligence and Computing, Intl Conf on Cloud and Big Data Computing, Intl Conf on Cyber Science and Technology Congress (DASC/PiCom/CBDCom/CyberSciTech), pages 1–6, Sep. 2022
- Giancarlo Fortino, Claudia Greco, Antonella Guzzo, and Michele Ianni. Identification and prediction of attacks to industrial control systems using temporal point processes. Journal of Ambient Intelligence and Humanized Computing, Sep 2022
- Giancarlo Fortino, Claudia Greco, Antonella Guzzo, and Michele Ianni. Neural network based temporal point processes for attack detection in industrial control systems. In 2022 IEEE International Conference on Cyber Security and Resilience (CSR), pages 221–226, 2022
- Michele Ianni and Elio Masciari. Some experiments on high performance anomaly detection. In 2022 30th Euromicro International Conference on Parallel, Distributed and Network-based Processing (PDP), pages 226–229. IEEE, 2022
- Davide Quarta, Michele Ianni, Aravind Machiry, Yanick Fratantonio, Eric Gustafson, Davide Balzarotti, Martina Lindorfer, Giovanni Vigna, and Christopher Kruegel. Tarnhelm: Isolated, transparent & confidential execution of arbitrary code in arm's trustzone. In *Proceedings of the 2021 Research on Offensive and Defensive Techniques in the Context of Man At The End (MATE) Attacks*, Checkmate '21, page 43–57, New York, NY, USA, 2021. Association for Computing Machinery
- Giancarlo Fortino, Antonella Guzzo, Michele Ianni, Francesco Leotta, and Massimo Mecella. Predicting activities of daily living via temporal point processes: Approaches and experimental results. Computers & Electrical Engineering, 96:107567, 2021
- Michele Ianni and Elio Masciari. Some experiments on activity outlier detection. In Sergio Greco, Maurizio Lenzerini, Elio Masciari, and Andrea Tagarelli, editors, Proceedings of the 29th Italian Symposium on Advanced Database Systems, SEBD 2021, Pizzo Calabro (VV), Italy, September 5-9, 2021, volume 2994 of CEUR Workshop Proceedings, pages 251–258. CEUR-WS.org, 2021

- Giancarlo Fortino, Antonella Guzzo, Michele Ianni, Francesco Leotta, and Massimo Mecella. Activity daily living prediction with marked temporal point processes. In Sergio Greco, Maurizio Lenzerini, Elio Masciari, and Andrea Tagarelli, editors, Proceedings of the 29th Italian Symposium on Advanced Database Systems, SEBD 2021, Pizzo Calabro (VV), Italy, September 5-9, 2021, volume 2994 of CEUR Workshop Proceedings, pages 387–394. CEUR-WS.org, 2021
- Michele Ianni and Elio Masciari. A compact encoding of security logs for high performance activity detection. In 29th Euromicro International Conference on Parallel, Distributed and Network-Based Processing, PDP 2021, Valladolid, Spain, March 10-12, 2021, pages 240-244. IEEE, 2021
- Michele Ianni, Elio Masciari, and Giancarlo Sperlí. A survey of big data dimensions vs social networks analysis. Journal of Intelligent Information Systems, pages 1–28, 2020
- G. Fortino, A. Guzzo, M. Ianni, F. Leotta, and M. Mecella. Exploiting marked temporal point processes for predicting activities of daily living. In 2020 IEEE International Conference on Human-Machine Systems (ICHMS), pages 1–6, 2020
- Antonella Guzzo, Michele Ianni, Andrea Pugliese, and Domenico Saccà. Modeling and efficiently detecting security-critical sequences of actions. Future Generation Computer Systems, 2020
- Sergio Greco, Michele Ianni, Elio Masciari, Domenico Saccà, and Irina Trubitsyna. Smart data exchange. In Maristella Agosti, Maurizio Atzori, Paolo Ciaccia, and Letizia Tanca, editors, Proceedings of the 28th Italian Symposium on Advanced Database Systems, Villasimius, Sud Sardegna, Italy (virtual due to Covid-19 pandemic), June 21-24, 2020, volume 2646 of CEUR Workshop Proceedings, pages 24-31. CEUR-WS.org, 2020
- M. Ianni, E. Masciari, G. M. Mazzeo, M. Mezzanzanica, and C. Zaniolo. Fast and effective big data exploration by clustering. Future Generation Computer Systems, 102:84–94, 2020
- Michele Ianni, Elio Masciari, and Domenico Saccà. An overview of the endless battle between virus writers and detectors: How compilers can be used as an evasion technique. In *Proceedings of the 8th International Conference on Data Science, Technology and Applications, DATA 2019, Prague, Czech Republic, July 26-28, 2019.*, pages 203–208, 2019
- Michele Ianni, Elio Masciari, and Domenico Saccà. Exotic compilers as a malware evasion technique.
  In Proceedings of the 27th Italian Symposium on Advanced Database Systems, Castiglione della Pescaia (Grosseto), Italy, June 16-19, 2019., 2019
- Michele Ianni, Elio Masciari, Giuseppe M. Mazzeo, and Carlo Zaniolo. How to implement a big data clustering algorithm: a brief report on lesson learned. In *Proceedings of the 34th ACM/SIGAPP* Symposium on Applied Computing, SAC 2019, Limassol, Cyprus, April 8-12, 2019, pages 1073– 1080, 2019
- Nunziato Cassavia, Sergio Flesca, Michele Ianni, Elio Masciari, Giuseppe Papuzzo, and Chiara Pulice. High performance computing by the crowd. In *Intelligent Methods and Big Data in Industrial* Applications., pages 91–101. 2019
- Nunziato Cassavia, Sergio Flesca, Michele Ianni, Elio Masciari, and Chiara Pulice. Distributed computing by leveraging and rewarding idling user resources from p2p networks. *Journal of Parallel and Distributed Computing*, 122:81 94, 2018
- Michele Ianni, Elio Masciari, Giuseppe M. Mazzeo, and Carlo Zaniolo. Clustering big data. In Jorge Bernardino and Christoph Quix, editors, Proceedings of the 7th International Conference on Data Science, Technology and Applications, DATA 2018, Porto, Portugal, July 26-28, 2018, pages 276–282. SciTePress, 2018
- Michele Ianni and Elio Masciari. Trusted environments for volunteer computing. In 2018 IEEE International Conference on Information Reuse and Integration, IRI 2018, Salt Lake City, UT, USA, July 6-9, 2018, pages 526–529, 2018
- Michele Ianni, Elio Masciari, Giuseppe M. Mazzeo, and Carlo Zaniolo. Efficient big data clustering. In Proceedings of the 22nd International Database Engineering & Applications Symposium, IDEAS 2018, Villa San Giovanni, Italy, June 18-20, 2018, pages 103-109, 2018

- Michele Ianni, Elio Masciari, Giuseppe Massimiliano Mazzeo, and Carlo Zaniolo. Clustering goes big: Clubs-p, an algorithm for unsupervised clustering around centroids tailored for big data applications. In 26th Euromicro International Conference on Parallel, Distributed and Network-based Processing, PDP 2018, Cambridge, United Kingdom, March 21-23, 2018, pages 558-561, 2018
- Nunziato Cassavia, Sergio Flesca, Michele Ianni, Elio Masciari, Giuseppe Papuzzo, and Chiara Pulice. High performance computing by the crowd. In 23rd International Symposium on Methodologies for Intelligent Systems, ISMIS 2017, 2017
- Nunziato Cassavia, Sergio Flesca, Michele Ianni, Elio Masciari, Giuseppe Papuzzo, and Chiara Pulice. A peer to peer approach to efficient high performance computing. In *Parallel, Distributed* and Network-based Processing (PDP), 2017 25th Euromicro International Conference on, pages 539–542. IEEE, 2017
- Nunziato Cassavia, Sergio Flesca, Michele Ianni, Elio Masciari, Giuseppe Papuzzo, and Chiara Pulice. Effective high performance computing using peer to peer networks. In 2017 International Conference on High Performance Computing & Simulation, HPCS 2017, Genoa, Italy, July 17-21, 2017, pages 32–36, 2017
- Michele Ianni and Elio Masciari. Trusted volunteer computing. In *Proceedings of the 25th Italian Symposium on Advanced Database Systems, Squillace Lido (Catanzaro), Italy, June 25-29, 2017.*, page 73, 2017
- Nunziato Cassavia, Sergio Flesca, Michele Ianni, Elio Masciari, Giuseppe Papuzzo, and Chiara Pulice. Efficient high performance computing by user networks. In *Proceedings of the 25th Italian* Symposium on Advanced Database Systems, Squillace Lido (Catanzaro), Italy, June 25-29, 2017., page 309, 2017
- Michelangelo Ceci, Roberto Corizzo, Fabio Fumarola, Michele Ianni, Donato Malerba, Gaspare Maria, Elio Masciari, Marco Oliverio, and Aleksandra Rashkovska. Big data techniques for supporting accurate predictions of energy production from renewable sources. In *Proceedings of the 19th International Database Engineering & Applications Symposium*, pages 62–71. ACM, 2015
- Michelangelo Ceci, Roberto Corizzo, Fabio Fumarola, Michele Ianni, Donato Malerba, Gaspare Maria, Elio Masciari, Marco Oliverio, and Aleksandra Rashkovska. Vipoc project research summary (discussion paper). In 23rd Italian Symposium on Advanced Database Systems, SEBD 2015, Gaeta, Italy, June 14-17, 2015., pages 208-215, 2015
- Michele Ianni, Elio Masciari, Giuseppe Massimiliano Mazzeo, Marco Oliverio, and Carlo Zaniolo. Hierarchical big data clustering (discussion paper). In 23rd Italian Symposium on Advanced Database Systems, SEBD 2015, Gaeta, Italy, June 14-17, 2015., pages 224-231, 2015
- Nunziato Cassavia, Michelangelo Ceci, Roberto Corizzo, Pietro Dicosta, Gianni Frascà, Fabio Fumarola, Michele Ianni, Donato Malerba, Gaspare Maria, Marco Mariani, Elio Masciari, Angelo Muolo, and Camillo Pastura. Virtual power operating center (vi-poc): Big data techniques for renewable energy market. In AI\*IA, 2014

## Service

- Associate Editor, Expert Systems, Wiley
- Guest Editor, Special Issue on Software Protection and Attacks, Journal of Information Security and Applications, Elsevier
- Guest Editor, Security and Privacy for the Internet of Things, Frontiers
- Guest Associate Editor, Frontiers in Computer Science Computer Security
- Review Editor, Frontiers in Robotics and AI Computational Intelligence in Robotics
- General Chair, Workshop on Attacks and Software Protection @ ESORICS, WASP 2023

- Chair, 2nd IoT Security workshop at 21st IEEE International Conference on Dependable, Autonomic & Secure Computing, DASC 2023
- Chair, IoT Security workshop at 20th IEEE International Conference on Dependable, Autonomic & Secure Computing, DASC 2022
- Session Chair, 7th IEEE Cyber Science and Technology Congress, IEEE CyberSciTech 2022
- Session Chair, Special Session on Computing and Applications for Cyber Internet of Things, Cyber-IoT 2022, IEEE CyberSciTech 2022
- Session Chair, Special Session on Cyber Social Computing and Cyber-Enabled Applications, CSC&CEA, IEEE CyberSciTech 2022
- Session Chair, 2022 IEEE International Conference on Cyber Security and Resilience, IEEE CSR 2022
- Web Chair, IJCAI 2022 International Workshop on Process Management in the AI era, PMAI@IJCAI 2022
- Organizer, CyberChallenge, Università della Calabria, 2023
- Organizer, CyberChallenge, Università della Calabria, 2022
- PhD Workshop Organizer, 1st International School on Internet of Things & Edge AI: Computing, Communications and Systems, Falerna (CS), Italy, 2022
- Organizing Committee, 29th Italian Symposium on Advanced Database Systems, SEBD 2021
- Afferente al Laboratorio Nazionale Cybersecurity del Consorzio Interuniversitario Nazionale per l'Informatica (CINI)
- Membro del laboratorio di Smart, PErvasive and Mobile systems Engineering (SPEME), Dipartimento di Ingegneria Informatica, Modellistica, Elettronica e Sistemistica (DIMES), Università della Calabria
- Reviewer, IEEE Transactions on Dependable and Secure Computing
- Reviewer, Computers and Electrical Engineering Elsevier
- Reviewer, Journal in Computer Virology
- Reviewer, IEEE Internet of Things Journal
- Reviewer, Forensic Science International: Digital Investigation Elsevier
- Reviewer, IEEE Transactions on Computers
- Reviewer, IEEE Transactions on Artificial Intelligence
- Reviewer, IEEE Intelligent Systems
- Reviewer, Journal of Intelligent Information Systems Springer
- Reviewer, Journal of Network and Computer Applications Elsevier
- Reviewer, Engineering Applications of Artificial Intelligence Elsevier
- Reviewer, Journal of Computer Virology and Hacking Techniques Springer
- Reviewer, Computers & Security Elsevier
- Reviewer, Computer Networks Elsevier
- Reviewer, Journal of Parallel and Distributed Computing Elsevier
- Reviewer, Information and Management Elsevier

- Reviewer, Machine Learning Springer
- Reviewer, International Conference on Networks, Communication and Information Technology, NCIT 2022
- Reviewer, 6th IEEE International Conference on Cybernetics and Computational Intelligence, CyberneticsCom 2022
- Reviewer, Book Device-Edge-Cloud Continuum Paradigms, Architectures and Applications, Springer 2023
- Subreviewer, 27th International Conference on Computer Supported Cooperative Work in Design, CSCWD 2024
- Subreviewer, 22nd International Conference of the Italian Association for Artificial Intelligence, AIxIA 2023
- Subreviewer, 26th International Conference on Computer Supported Cooperative Work in Design, CSCWD 2023
- Subreviewer, 30th ACM International Conference on Information and Knowledge Management, CIKM 2021
- Subreviewer, Italian Conference on CyberSecurity, ITASEC 2020
- Subreviewer, 2018 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining, ASONAM 2018
- Program Committee, Workshop on Security and Artificial Intelligence, SECAI @ ESORICS 2024
- Program Committee, Workshop on Operating Systems and Virtualization Security, OSVS @ IEEE Euro S&P 2024
- Program Committee, International C\* Conference on Computer Science & Software Engineering,  $C^3S^2E$  2024
- Program Committee, IEEE Joint Conferences DASC/PICom/CBDCom/CyberSciTech 2023
- Program Committee, International Conference on Embedded Wireless Systems and Networks, EWSN 2023
- Program Committee, IJCAI 2023 International Workshop on Process Management in the AI era, PMAI@IJCAI 2023
- Program Committee, Intelligent Systems in Forensic Engineering, ISIFE 2023
- Program Committee, 26th International Database Engineering & Applications Symposium, IDEAS 2023
- Program Committee, 26th International Symposium on Methodologies for Intelligent Systems, IS-MIS 2022
- Program Committee, IJCAI 2022 International Workshop on Process Management in the AI era, PMAI @ IJCAI 2022
- Program Committee, 20th IEEE International Conference on Dependable, Autonomic & Secure Computing, DASC 2022
- Program Committee, International Conference on Applied Intelligence and Informatics, AII 2022
- Program Committee, 26th International Database Engineering & Applications Symposium, IDEAS 2022
- Program Committee, 25th International Database Engineering & Applications Symposium, IDEAS 2021

- Program Committee, 24th International Database Engineering & Applications Symposium, IDEAS 2020
- Program Committee, 23rd International Database Engineering & Applications Symposium, IDEAS 2019
- Program Committee, 1st Workshop on Machine Learning, Intelligent Systems and Statistical Analysis for Pattern Recognition in Real-life Scenarios, IISA 2018
- Program Committee, 22nd International Database Engineering & Applications Symposium, IDEAS 2018
- Program Committee, 20th International Database Engineering & Applications Symposium, IDEAS 2016

#### Alumni

- Co-Advisor, Shabana Jokhio, National PhD on Blockchain e Distributed Ledger Technology
- Co-Advisor, Majid Riaz, PhD in Information and Communication Technologies, Università della Calabria
- Co-Advisor, Farwa Ikram, PhD in Information and Communication Technologies, Università della Calabria
- Advisor, Eros De Rose, Browser fingerprinting: tecniche, applicazioni e contromisure, Laurea Magistrale in Ingegneria Informatica, Università della Calabria, 2023
- Advisor, Keivan Mahmoudi Rahmani, Analisi Sperimentale della Sicurezza dei Sistemi Keyless, Laurea Magistrale in Ingegneria Informatica, Università della Calabria, 2023
- Advisor, Alfredo Santo, Server Side Request Forgery: analisi, implementazioni di attacco e tecniche di mitigazione, Laurea Magistrale in Ingegneria Informatica, Università della Calabria, 2023
- Advisor, Giuseppe Seminara, Implementazione di uno strumento di generazione di una copia legale certificata di una risorsa digitale, Laurea Magistrale in Ingegneria Informatica, Università della Calabria, 2023
- Advisor, Yevenhii Sliusar, Analisi Sperimentale di Toolkit per Dynamic Instrumentation, Laurea in Ingegneria Informatica, Università della Calabria, 2023
- Advisor, Giuseppe Beltrano, Progetto e implementazione di un sistema basato su Machine Learning per il rilevamento di attacchi CSRF, Laurea Magistrale in Ingegneria Informatica, Università della Calabria, 2022
- Advisor, Andrea Rizzuti, Progetto e implementazione di uno strumento per signature scanning di rappresentazione intermedia di binari, Laurea Magistrale in Ingegneria Informatica, Università della Calabria, 2022
- Advisor, Giuseppe Salerno, Progetto e implementazione di uno strumento per l'identificazione automatica di attacchi phishing, Laurea Magistrale in Ingegneria Informatica, Università della Calabria, 2022
- Advisor, Viviana Colantonio, Progetto ed implementazione di uno strumento per il Return Oriented Programming, Laurea Magistrale in Ingegneria Informatica, Università della Calabria, 2022
- Advisor, Francesco Romeo, Studio e sperimentazione di tecniche di analisi simbolica per eseguibili, Laurea Triennale in Ingegneria Informatica, Università della Calabria, 2022
- Advisor, Francesco Musmanno, Cross-Site Leaks: analisi dell'attacco e tecniche di mitigazione, Laurea Magistrale in Ingegneria Informatica, Università della Calabria, 2022
- Advisor, Lorenzo Morelli, Requisiti e Verifica della Sicurezza delle Piattaforme Mobili: Lo Standard OWASP MASVS, Laurea Magistrale in Ingegneria Informatica, Università della Calabria, 2021

- Advisor, Antonio Piluso, Progetto ed implementazione di un tool di Heap Analysis basato su Dynamic Binary Instrumentation, Laurea Magistrale in Ingegneria Informatica, Università della Calabria, 2021
- Advisor, Antonio Rosanò, Heap Exploitation: analisi di scenari di attacco e tecniche di mitigazione, Laurea Magistrale in Ingegneria Informatica, Università della Calabria, 2021
- Advisor, Valentina Stefanizzi, Analisi e confronto di tool di vulnerability assessment, Laurea Magistrale in Ingegneria Informatica, Università della Calabria, 2021
- Advisor, Giuseppe Seminara, Hash Length Extension: analisi ed implementazione dell'attacco, Laurea Triennale in Ingegneria Informatica, Università della Calabria, 2020
- Advisor, Gianmarco Magnone, Analisi e confronto tra framework di Binary Instrumentation, Laurea Magistrale in Ingegneria Informatica, Università della Calabria, 2020
- Advisor, Giuseppe Salerno, Analisi di scenari di attacco basati su Race Condition e tecniche di mitigazione, Laurea Triennale in Ingegneria Informatica, Università della Calabria, 2020
- Advisor, Francesco Musmanno, Cross-site scripting: analisi dell'attacco e tecniche di mitigazione, Laurea Triennale in Ingegneria Informatica, Università della Calabria, 2019
- Advisor, Benito Petrovik, Un attacco downgrade al protocollo HTTPS, Laurea Triennale in Ingegneria Informatica, Università della Calabria, 2019
- Co-Advisor, Federico Bertelli, Conversazioni Invisibili: il Sensore di Luminosità per Comunicare con gli Smartphone, Laurea Magistrale in Ingegneria e Scienze Informatiche, Università degli studi di Verona, 2023
- Co-Advisor, Alan Michael Padovani, Heap spraying attacks and countermeasures, Master's degree in Computer Science and Engineering, Università degli studi di Verona, 2022
- Co-Advisor, Giovanni Schiavone, anonsw Un approccio alternativo per l'author obfuscation, Laurea Magistrale in Ingegneria e Scienze Informatiche, Università degli studi di Verona, 2022
- Co-Advisor, Massimiliano Cittadini, Un metodo pseudocasuale di offuscamento dell'attribuzione di codici sorgente, Laurea Magistrale in Ingegneria e Scienze Informatiche, Università degli studi di Verona, 2022
- Co-Advisor, Gianluca Ziliani, ROPGfinder, Laurea Triennale in Informatica, Università degli studi di Verona, 2022

## Other

• CTF, In my freetime I play CTF, sometimes alone, sometimes with Shellphish.