Nicola Bena
CURRICULUM VITAE

Contents

1 Personal information

Surname: Bena
Name: Nicola
Born date: 16 February 1996

2 Short biography

2.1 Current position

PhD student (XXXVI cycle) Department of Computer Science "Giovanni degli Antoni"
Università degli Studi di Milano

2.2 Short educational and scientific history

- Since *May 2022*: "cultore della materia" in Reti di calcolatori ("expert of Computer networks").

- *November 2020–today*: PhD student in Computer Science (XXXVI cycle) at Università degli Studi di Milano.

- *June 2020–today*: research assistant at Computer Science DepartÓìment, Università degli Studi di Milano.

- *April 2020*: graduation in Cybersecurity at Università degli Studi di Milano with full marks. Thesis: "Verifiche di Assurance in Architetture di Nuova Generazione: Uno Schema di Certificazione per Sistemi Basati su DevOps" (in Italian). Advisor: Prof. Claudio A. Ardagna.

- *November 2019–today*: collaboration with Moon Cloud srl, innovative startup and spin-off of Università degli Studi di Milano, for security evaluation and monitoring of IT systems.

- *October 2019–January 2020*: research assistant within the context of EU Horizon 2020 project *Cyber security cOmpeteNce fOr Research anD Innovation* (CONCORDIA), Computer Science Department, Università degli Studi di Milano.

- *February 2019–May 2019*: research assistant at Computer Science Department, Università degli Studi di Milano.

- *October 2018–today*: member of the laboratory *SEcure Service-oriented Architectures Research Lab (SESAR Lab)*, Computer Science Department, Università degli Studi di Milano.

- *October 2018*: graduation in Systems and Network Security at Università degli Studi di Milano with full marks. Thesis: "Studio ed implementazione di una architettura avanzata basata su VPN per Security Assessment" (in Italian). Advisor: Prof. Marco Anisetti.

3 Research activities and scientific publications

3.1 Participation in research projects

He is participating/has participated in the following research projects:

- Piano Nazionale di Ripresa e Resilienza (PNRR)
  Project Title: MUSA: Multilayered Urban Sustainability Action (MUSA), Spoke 2 Big Data-Open Data in Life Sciences
  Duration: September 2022 – August 2025
  Unit: Università degli Studi di Milano
  Activities: Design and development of a holistic, innovative digital architecture for the storage and safe exchange of big data for life sciences.

- Program EU Horizon 2020 (SU-ICT - Boosting the effectiveness of the Security Union)
  Project Title: Cyber security cOmpeteNce fOr Research anD Innovation (CONCORDIA)
  Period: January 2019 – April 2023
  Unit: Università degli Studi di Milano
  Activities: Definition of a set of threat reports analyzing the evolution of IT security threats and vulnerabilities, gaps and challenges that will be a part of the near future of research on IT security, and the security countermeasures currently available.

- Program EU Horizon 2020 (SU-INFRA02-2019 Security for smart and safe cities, including for public spaces)
  Project Title: Intelligent Management of Processes, Ethics and Technology for Urban Safety (IMPETUS)
  Period: September 2020 – August 2022
  Unit: Università degli Studi di Milano
  Activities: Design and development of a novel ingestion-time data governance approach based on access control, mediating access and usage of smart city data for cybersecurity.

- Grandi Sfide di Ricerca (GSA) – Strategic Line 4: Sicurezza informatica/Cloud
  Project Title: Sovereign Edge-Hub: Un'Architettura Cloud-Edge per la Sovranità Digitale nelle Scienze della Vita (SOV-EDGE-HUB)
  Period: January 2022 – December 2022
  Unit: Università degli Studi di Milano
  Activities: Design and implementation of a cloud-edge infrastructure for the Università degli Studi di Milano.

- Technology Innovation Institute (TII) Funded Research Projects
  Project Title: Prevention and detection of poisoning and adversarial Attacks on Machine Learning Models (PALM)
  Period: November 2020 – April 2023
  Unit: Università degli Studi di Milano
  Activities: Definition of a methodology to prevent training poisoning attacks by strengthening the robustness of the ML training phase.

3.2 Visiting at research centers and participation at national or international center or research groups

- *June – August 2023*: visiting at LIRIS Lab, INSA Lyon (visiting scholar), France. The research activity, in collaboration with Prof. Chirine Guedira, Prof. Nadia Bennani, and Dr. Genoveva Vargas-Solar, aimed to define new methodologies for trust management in modern distributed systems.
- *February – April 2023*: visiting at Center for Cyber physical Security, Khalifa University (visiting scholar), Abu Dhabi, UAE. The research activity, in collaboration with Prof. Chan Yeob Yeun, aimed to design new methodologies to increase the robustness of machine learning against poisoning attacks.

3.3 Organization of/participation to international conferences and workshops

Program Chair of the following conferences:

- *3rd Italian Conference on Big Data and Data Science (ITADATA 2024)*, September 2024, Pisa, Italy
- *2nd Italian Conference on Big Data and Data Science (ITADATA 2023)*, September 2023, Naples, Italy.

Member of the Program Committee of the following conferences/workshops:

- *2024 5th International Conference on Computing, Networks and Internet of Things (CNIOT 2024)*, May 2024, Tokyo, Japan.
- *2024 International Conference on Communication, Information and Digital Technologies (ICCIDT 2024)*, May 2024, Wuhan, China.
- *14th International Conference on Cloud Computing and Services Science (CLOSER 2024)*, April 2024, Angers, France.
- *21th IEEE International Symposium on Parallel and Distributed Processing with Applications (IEEE ISPA 2023)*, December 2024, Wuhan, China.
- *14th IEEE International Conference On Cloud Computing Technology And Science (CloudCom 2023)*, December 2023, Naples, Italy.
- *22nd IEEE International Conference on Trust, Security and Privacy in Computing and Communications (TrustCom-2023)*, November 2023, Exeter, UK.
- *2023 IEEE International Conference on Cyber Security and Resilience (IEEE CSR 2023)*, July - August 2023, Venice, Italy.
- *IEEE Cloud Summit 2023*, July 2023, Baltimora, MD, USA.
- *IEEE International Conference on Cloud Computing (IEEE CLOUD 2023)*, July 2023, Chicago, Illinois, USA.
- *7th IEEE International Workshop on Big Data And IoT Security in Smart Computing (BITS2023) During SMARTCOMP 2023 (IEEE BITS 2023)*, workshop part of SMARTCOMP 2023, June 2023, Nashville, TN, USA.
- *International Workshop on AI-driven Trustworthy, Secure, and Privacy-Preserving Computing (AidTSP 2023)*, workshop part of IEEE INFOCOM 2023, May 2023, New York, USA.
- *4th International Conference on Computing, Networks and Internet of Things (CNIOT 2023)*, May 2023, Xiamen, China.
- *13th International Conference on Cloud Computing and Services Science (CLOSER 2023)*, April 2023, Prague, Czech Republic.
- *IEEE Global Communications Conference (IEEE GLOBECOM 2022)*, December 2022, Rio de Janeiro, Brazil.
- *5th International Conference on Machine Learning for Networking (MLN 2022)*, November 2022, Paris, France.
- *IEEE International Conference on Trust, Security and Privacy in Computing and Communications (IEEE TRUSTCOM 2022)*, October 2022, Wuhan, China.
- *1st Italian on Big Data and Data Science (ITADATA 2022)*, September 2022, Milan, Italy.
- *2022 IEEE International Conference on Cyber Security and Resilience (IEEE CSR 2022)*, July 2022, Virtual.
- *IEEE International Conference on Cloud Computing (IEEE CLOUD 2022)*, July 2022, Barcelona, Spain.
- *6th IEEE International Workshop on Big Data And IoT Security in Smart Computing (BITS2022) During SMARTCOMP 2022, (IEEE BITS 2022)*, workshop part of SMARTCOMP 2022, June 2022, Espoo, Finlandia.
- *3rd International Conference on Computing, Networks and Internet of Things (CNIOT 2022)*, May 2022, Qingdao, China.
- *12th International Conference on Cloud Computing and Services Science (CLOSER 2022)*, April 2022, Virtual.
- *IEEE International Conference on Cloud Computing (IEEE CLOUD 2021)*, September 2021, Chicago, IL, USA.
- *5th IEEE International Workshop on Big Data And IoT Security in Smart Computing (BITS2021) During SMARTCOMP 2021, (IEEE BITS 2021)*, workshop part of SMARTCOMP 2021, August 2021, Irvine, CA, USA.

- *2nd International Conference on Computing, Networks and Internet of Things (CNIOT 2021)*, May 2021, Beijing, China.
- *3rd International Conference on Machine Learning for Networking (MLN 2020)*, November 2020, Paris, France.

He has carried out, as *sub-reviewer*, reviews of works submitted to the following international conferences:

- *18th International Conference on Information Systems Security (ICISS 2022)*, December 2022, Tirupati, India.
- *37th International Conference on ICT Systems Security and Privacy Protection (IFIP SEC 2022)*, June 2022, Copenhagen, Denmark.
- *37th ACM/SIGAPP Symposium on Applied Computing (ACM SAC 2022)*, April 2022, Brno, Czech Republic.
- *14th IEEE/ACM International Conference on Utility and Cloud Computing (IEEE/ACM UCC 2021)*, December 2021, Leicester, UK.
- *6th International Conference on Systems, Control and Communications (ICSCC 2021)*, October 2021, Chongqing, China.
- *36th International Conference on ICT Systems Security and Privacy Protection (IFIP SEC 2021)*, June 2021, Oslo, Norway.
- *19th IEEE International Conference on Trust, Security and Privacy in Computing and Communications (IEEE TRUSTCOM 2020)*, December 2020–January 2021, Guangzhou, China.
- *International Conference on Security and Privacy in Digital Economy (SPDE 2020)*, October–November 2020, Quzhou, Zhejiang, China.
- *2020 IEEE International Conference on Cloud Computing (IEEE CLOUD 2020)*, Ottobre 2020, Beijing, China.
- *11th IEEE International Conference on Cloud Computing Technology and Science (CLOUDCOM 2019)*, December 2019, Sidney, Australia.

He has been *publication chair* of the following conferences:

- *1st Italian Conference on Big Data and Data Science (ITADATA 2022)*, September 2022, Milan, Italy.

He has been *publicity chair* of the following conferences:

- *IEEE International Conference on Cloud Computing (IEEE CLOUD 2024)*, July 2024, Shenzhen, China.
- *IEEE International Conference on Web Services (IEEE ICWS 2024)*, July 2024, Shenzhen, China.
- *1st Italian Conference on Big Data and Data Science (ITADATA 2022)*, September 2022, Milan, Italy.
- *Big Data and Data Science for Next-Generation Distributed Systems (BDDS 2022)*, workshop part of *IEEE World Congress on Computational Intelligence (WCCI 2022)*, July 2022, Padua, Italy.
- *IEEE World Congress on Services (IEEE SERVICES 2022)*, July 2022, Barcelona, Spain.
- *IEEE World Congress on Services (IEEE SERVICES 2021)*, September 2021, Chicago, IL, USA.

He has presented the following works at international conferences:

- M. Anisetti, C. A. Ardagna, N. Bena, V. Giandomenico, G. Gianini, "Lightweight Behavior-Based Malware Detection", in *Proc. of 15th International Conference on Management of Digital Systems (MEDES 2023)*, May 2023, Heraklion, Grecia.
- M. Anisetti, C. A. Ardagna, N. Bena, "Certification Meets Modern Service-Based Systems: Connecting Service and Certificate Life Cycle", in *Italian Conference on Cybersecurity (ITASEC 2023)*, Bari, Italy.
- C. A. Ardagna, N. Bena, R. M. de Pozuelo, "Bridging the Gap Between Certification and Software Development", in *International Conference on Availability, Reliability and Security (ARES 2022)*, August 2022, Vienna, Austria.
- N. Bena, R. Bondaruc, A. Polimeno, "Security Assurance in Modern IoT Systems", in *4th Workshop on Connected Intelligence for IoT and Industrial IoT Applications (C3IA)*, part of *IEEE 95th Vehicular Technology Conference (IEEE VTC 2022-Spring)*, June 2022, Helsinki, Finland.

- M. Anisetti, C. A. Ardagna, N. Bena, R. Bondaruc, "Towards an Assurance Framework for Edge and IoT Systems", in *IEEE International Conference on Edge Computing (IEEE EDGE 2021)*, December 2021, Guangzhou, China.
- M. Anisetti, C. A. Ardagna, N. Bena, A. Foppiani, "An Assurance-Based Risk Management Framework for Distributed Systems," in *International Conference on Web Services (IEEE ICWS 2021)*, September 2021, Chicago, IL, USA.
- M. Anisetti, C. A. Ardagna, N. Bena, E. Damiani, "Stay Thrifty, Stay Secure: A VPN-Based Assurance Framework for Hybrid Systems," in *17th International Conference on Security and Cryptography (SECRYPT 2020)*, July 2020, Paris, France (winner of the award "Best Student Paper Award").

3.4 Editorial activities

He has carried out, as *reviewer*, reviews of works submitted to the following international journals:

- *IEEE Transactions on Artificial Intelligence.*
- *Computers in Biology and Medicine.*
- *SN Computer Science.*
- *IEEE Transactions on Cloud Computing*
- *Computers and Electrical Engineering.*
- *IEEE Transactions on Network and Service Management.*
- *Journal of Reliable Intelligent Environments.*
- *IEEE Transactions on Services Computing.*
- *Computers & Security.*
- *IEEE Access.*
- *Annals of Telecommunications.*
- *Mobile Information Systems.*

He has carried out revision activities of monographs submitted to John Wiley and Sons publisher.

3.5 Awards, recognitions and certifications

Awards and recognitions

- Winner of the award "Best Student Paper Award" at the international conference "17th International Joint Conference on e-Business and Telecommunications (ICETE 2020)".
  Title of the paper: "Stay Thrifty, Stay Secure: A VPN-based Assurance Framework for Hybrid Systems".
  Coauthors: M. Anisetti, C. A. Ardagna, E. Damiani.

Certifications

- In *June 2015* he obtained the certification "EUCIP IT Administrator – modulo Sicurezza Informatica"

3.6 Scientific publications

Edited books

EB–1 M. Anisetti, A. Bonifati, N. Bena, C. A. Ardagna, D. Malerba (eds.), "Proceedings of the 1st Italian Conference on Big Data and Data Science (ITADATA2022)", CEUR-Workshop, 2022.

Papers in international journals

IJ–1 M. Anisetti, C. A. Ardagna, N. Bena, E. Damiani, "Rethinking Certification for Trustworthy Machine-Learning-Based Applications", in *IEEE Internet Computing*, vol. 27, no. 6, 2023.

IJ–2 M. Anisetti, C. A. Ardagna, A. Balestrucci, N. Bena, E. Damiani, C. Y. Yeun, "On the Robustness of Random Forest Against Untargeted Data Poisoning: An Ensemble-Based Approach", in *IEEE Transactions on Sustainable Computing*, 2023.

IJ–3 C. A. Ardagna, N. Bena, C. Hebert, M. Krotsiani, C. Kloukinas, and G. Spanoudakis, "Big Data Assurance: An Approach Based on Service-Level Agreements", in *Big Data*, 2023.

IJ–4 Z. Zhang, S. Umar, Y. Al Hammadi, S. Yoon, E. Damiani, C. A. Ardagna, N. Bena, C. Yeob Yeun, "Explainable Data Poison Attacks on Human Emotion Evaluation Systems based on EEG Signals", in *IEEE ACCESS*, vol. 11, 2023.

IJ–5 M. Anisetti, C. A. Ardagna, N. Bena, "Multi-Dimensional Certification of Modern Distributed Systems", in *EEE Transactions on Services Computing*, vol. 16, no. 3, 2023.

Papers in conference proceedings and international workshops

IC–1 M. Anisetti, C. A. Ardagna, N. Bena, "Continuous Certification of Non-Functional Properties Across System Changes", in *Proc. of 21st International Conference on Service-Oriented Computing (ICSOC 2023)*, November–December 2023, Rome, Italy.

IC–2 C. A. Ardagna, N. Bena, "Non-Functional Certification of Modern Distributed Systems: A Research Manifesto", in *Proc. of IEEE International Conference on Software Services Engineering (IEEE SSE 2023)*, July 2023, Chicago, IL, USA.

IC–3 M. Anisetti, C. A. Ardagna, N. Bena, V. Giandomenico, G. Gianini, "Lightweight Behavior-Based Malware Detection", in *Proc. of 15th International Conference on Management of Digital Systems (MEDES 2023)*, May 2023, Heraklion, Greece.

IC–4 C. A. Ardagna, N. Bena, R. M. de Pozuelo, "Bridging the Gap Between Certification and Software Development", in *Proc. of International Conference on Availability, Reliability and Security (ARES 2022)*, August 2022, Vienna, Austria.

IC–5 M. Anisetti, N. Bena, F. Berto, G. Jeon, "A DevSecOps-based Assurance Process for Big Data Analytics", in *Proc. of IEEE International Conference on Web Services (IEEE ICWS 2022)*, July 2022, Barcelona, Spain.

IC–6 N. Bena, R. Bondaruc, A. Polimeno, "Security Assurance in Modern IoT Systems", in *Proc. of IEEE 95th Vehicular Technology Conference (IEEE VTC 2022-Spring)*, June 2022, Helsinki, Finland.

IC–7 M. Anisetti, C. A. Ardagna, N. Bena, R. Bondaruc, "Towards an Assurance Framework for Edge and IoT Systems", in *Proc. of IEEE International Conference on Edge Computing (IEEE EDGE 2021)*, December 2021, Guangzhou, Cina.

IC–8 M. Anisetti, C. A. Ardagna, N. Bena, A. Foppiani, "An Assurance-Based Risk Management Framework for Distributed Systems," in *Proc. of IEEE International Conference on Web Services (IEEE ICWS 2021)*, September 2021, Chicago, IL, USA.

IC–9 M. Anisetti, C. A. Ardagna, N. Bena, E. Damiani, "An Assurance Framework and Process for Hybrid Systems", in *Proc. of the 17th International Joint Conference on e-Business and Telecommunications (ICETE 2020)*, July 2020, Paris, France.

IC–10 M. Anisetti, C. A. Ardagna, N. Bena, E. Damiani, "Stay Thrifty, Stay Secure: A VPN-Based Assurance Framework for Hybrid Systems," in *Proc. of the 17th International Conference on Security and Cryptography (SECRYPT 2020)*, July 2020, Paris, France.

Chapters in books/encyclopedias

BC–1 C. A. Ardagna, N. Bena, "Location Information (privacy of)," in *Encyclopedia of Cryptography, Security and Privacy (3rd Ed.)*, S. Jajodia, P. Samarati and M. Young (eds.), Springer, 2020.

BC–2 C. A. Ardagna, N. Bena, "Privacy-Aware Languages," in *Encyclopedia of Cryptography, Security and Privacy (3rd Ed.)*, S. Jajodia, P. Samarati and M. Young (eds.), Springer, 2020.

BC–3 C. A. Ardagna N. Bena, "XML-Based Access Control Languages," in *Encyclopedia of Cryptography, Security and Privacy (3rd Ed.)*, S. Jajodia, P. Samarati and M. Young (eds.), Springer, 2020.

Other publications

OP–1 M. Anisetti, C. A. Ardagna, N. Bena, E. Damiani, J. Sessa, "Threats, Gaps and Challenges in the Era of COVID-19", in *CONCORDIA blog*, 2021. `https://www.concordia-h2020.eu/blog-post/threats-gaps-and-challenges-in-the-era-of-covid-19/`.

OP–2 M. Anisetti, C. A. Ardagna, N. Bena, E. Damiani, J. Sessa, "Countermeasures and Research Actions", in *CONCORDIA blog*, 2022. `https://www.concordia-h2020.eu/blog-post/countermeasures-and-research-actions/`.

4 Teaching activities

Lecturer for the following postgraduate courses at Università degli Studi di Milano (in Italian):

- *November 2023*: "AI: poisoning attacks and countermeasure", Corso di Perfezionamento in Criminalità Informatica e Investigazioni Digitali – Intelligenza Artificiale, attacchi, crimini informatici, investigazioni e aspetti etico-sociali (with C. A. Ardagna).
- *June 2022*: "Il metaverso da un punto di vista tecnico e informatico", Corso di perfezionamento in Big Data, Artificial Intelligence e Piattaforme – Aspetti tecnici e giuridici connessi all'utilizzo dei dati e alla loro tutela (with C. A. Ardagna).
- *December 2021*: "L'idea di anonimato e il presentarsi in rete anonimi", Corso di Perfezionamento online in Criminalità Informatica e Investigazioni Digitali – Le procedure di investigazione e di rimozione dei contenuti digitali. Pornografia, proprietà intellettuale, odio e terrorismo, oblio, tutela della reputazione (with C. A. Ardagna).
- *October 2020*: "I filtri e l'utilizzo di strumenti quali VPN e Tor", Corso di Perfezionamento online in Criminalità Informatica e Investigazioni Digitali – La digital forensics sulle infedeltà del partner, del dipendente, del professionista e sulle frodi nelle piattaforme digitali (with C. A. Ardagna).

Lecturer for the following online courses.

- "Cybersecurity Consultant: A security assessment scenario". CONCORDIA Certified Cybersecurity Consultant (Virtual), November 2022 (with M. Anisetti, A. Polimeno).
- "Cybersecurity Consultant: A security assessment scenario". CONCORDIA Certified Cybersecurity Consultant (Virtual), May 2022 (with M. Anisetti, A. Polimeno).
- "Cybersecurity Consultant: A security assessment scenario". CONCORDIA Certified Cybersecurity Consultant (Virtual), November 2021 (with M. Anisetti, A. Polimeno).
- "Cybersecurity Consultant: A security assessment scenario". CONCORDIA Certified Cybersecurity Consultant (Virtual), June 2021 (with M. Anisetti, A. Polimeno).

4.1 Tutoring activities

Tutor of the following courses of the BsC in Systems and Network Security, Department of Computer Science, Università degli Studi di Milano (in Italian):

- A.Y. 2019-20: *Progettazione di software sicuro.*
- A.Y. 2019-20: *Progettazione model-driven del software.*
- A.Y. 2019-20: *Reti di calcolatori (laboratory).*
- A.Y. 2021-22: *Reti di calcolatori (laboratory).*

He is/has been tutor of the following courses within the Systems and Network Security (online version), Department of Computer Science, Università degli Studi di Milano (in Italian):

- A.Y. 2019-20: *Reti di calcolatori.*
- A.Y. 2020-21: *Reti di calcolatori.*
- A.Y. 2021-22: *Reti di calcolatori.*
- A.Y. 2022-23: *Reti di calcolatori.*

4.2 Supervisor/Co-supervisor of BsC and MsC theses

He is following/has followed, as co-supervisor, the following BsC theses, in the context of topics related to cybersecurity, assurance evaluation, cloud, microservices.

- Marco A. Bonissi. "Studio e realizzazione di uno strumento per il rilevamento di exfiltration di dati".
- Ruslan Bondaruc. "Studio e realizzazione di un IDS di nuova generazione basato su un'architettura edge".
- Ruslan Bondaruc. "Studio e sviluppo di un'architettura 5G per sistemi di intrusion detection".
- Carlo Civardi. "Implementation of an IoT Environment to Simulate Assurance Activities".

- Simone Corradin. "Design e realizzazione di uno strumento per monitoraggio di VPN".
- Matteo dal Grande. "Studio e implementazione di una pipeline di DevSecOps".
- Ez Eddine Ed Daouy. "Studio ed implementazione di sonde per la collezione di log".
- Yannick Joly. "Studio e implementazione di un sistema di security assurance basato su monitoraggio: un caso di studio campus scolastico".
- Giovanni Locatelli. "Studio e realizzazione di una soluzione di hardening per Windows".
- Nicola Lopatriello. "Un tool per la gestione del ciclo di vita di controlli di security assurance".
- Stefano Maddé. "Studio e sviluppo di una sonda di rete per rilevazione di allegati e-mail infetti".
- Michele Mastroberti. "I firewall e le minacce criptate".
- Luca Mori. "Design and implementation of a risk management solution for machine learning models".
- Xhanluka Rama. "Design e sviluppo di uno strumento per la generazione automatica di report di sicurezza".
- Luca Ruggeri. "Studio ed implementazione di un sistema per l'automazione di attività di penetration testing".
- Victoria Sheng. "Design, progettazione e sviluppo di una dashboard per l'analisi e la visualizzazione dei risultati di un processo di security assurance".
- Daniel Simonini. "Studio ed implementazione di un sistema di autenticazione con JWT".
- Salvatore Sorvillo. "Data poisoning in federated learning".
- Christian Vaccarino. "Studio ed implementazione di sonde per la verifica di sicurezza di sistemi Windows".

He is following/has followed, as co-supervisor, the following MsC theses, in the context of topics related to cybersecurity, assurance evaluation, cloud, microservices.

- Ruslan Bondaruc. "An Advanced Security Assurance System for Edge/IoT Environments".
- Matteo Cavagnino. "Design and Development of an Assurance Methodology for Security Certifications in IoT Systems".
- Andrei Cosmin Cozmei. "Studio di soluzioni di sicurezza in ambito IoT basate su Machine Learning".
- Alex Fortunato. "Studio ed Implementazione di un Sistema per l'Assurance di Firewall e Dispositivi di Sicurezza Perimetrale".
- Marco Pedrinazzi. "A Transparent Certification Scheme Based on Blockchain".

He is following/has followed, as co-supervisor, the following visiting students at Università degli Studi di Milano and Moon Cloud srl, in the context of topics related to cybersecurity, assurance evaluation, cloud, microservices.

- Nicolas Tourette. "Design and develop probes for host or network scan against malwares or viruses". University of Burgundy School of Materials & Sustainable Development and Computer Science & Electronics Engineering.

4.3 Seminars

- "Anonimato in Rete: Dai Cookie a Tor". Lecture within the course *Reti di Calcolatori*, Bachelor's Degree in Computer Science, Università degli Studi di Napoli "Parthenope", Naples, December 2023.
- "Assurance in Modern ICT Systems: From Theory to Practice". Shandong University of Technology, Cina, August 2023 (with M. Anisetti).
- "Distributed Systems Certification: From Services to Machine Learning". INSA Lyon, France, June 2023.
- "Moon Cloud: a Distributed System for Security Assurance". Lecture within the course *Cloud Computing Technologies*, Master's Degree in Computer Science, Università degli Studi di Milano, Milan, June 2023.
- "Multi-Dimensional Certification of Artificial Intelligence". *Building Bridges through Multidisciplinary Cooperation: Perspective Approaches for Inclusive Artificial Intelligence*, Milan, May 2023.
- "Assurance-based Security Governance for ICT systems". Sapienza Università degli Studi di Roma, Rome. April 2023 (with M. Anisetti).
- "Distributed Systems Certification: From Services to Machine Learning". Khalifa University, Abu Dhabi, UAE, March 2023.

- "A Multi-Dimensional Certification Scheme for Modern Services". *First Conference on System and Service Quality (QualIITA 2022)*, Politecnico di Milano, November 2022.
- "Security and Privacy of the Data Lake Architecture". PhD Day Hub, Università degli Studi di Milano, October 2022.
- "Bridging the Gap Between Certification and Software Development". CONCORDIA WP1 Meeting, June 2022.
- "An Assurance-Based Risk Management Framework for Distributed Systems". CONCORDIA T1.1 Meeting, July 2021.
- "Moon Cloud: una Piattaforma per la Cybersecurity". Open day, Department of Computer Science, Università degli Studi di Milano, February 2020 (with M. Anisetti, A. Polimeno).
- "Moon Cloud: Governance di Sicurezza e Verifica di Conformità". Milano Digital Week, Department of Computer Science, Università degli Studi di Milano, March 2019 (with C. A. Ardagna).
- "Moon Cloud: Governance di Sicurezza e Verifica di Conformità". Open day, Department of Computer Science, Università degli Studi di Milano, February 2019 (with P. Ceravolo).

5 Other

Membership of organizations and associations

- Secretary of the CINI Natinal Lab on Data Science
- Student Member IEEE

Language skills

- Italian: mothertongue
- English: B2

Digital skills

- Programming: C, Go, Java, Python, Rust, Typescript
- Development paradigms: GraphQL, REST; development methodologies: DevOps, DevSecOps
- Operating systems: Linux, MacOS, Windows
- Other: Docker, Kubernetes, Latex, PostgreSQL

Date: 29 December 2023 Location: Milano