



SERICS

SECURITY AND RIGHTS IN THE CYBERSPACE

SERICS CYBERSECURITY ACADEMY

**PROMOTION AND SUPPORT ACTIVITIES
FOR SPECIALISED DOCTORAL SCHOOLS**



The training program provides specialised and integrative training in beneficiary doctoral programs.

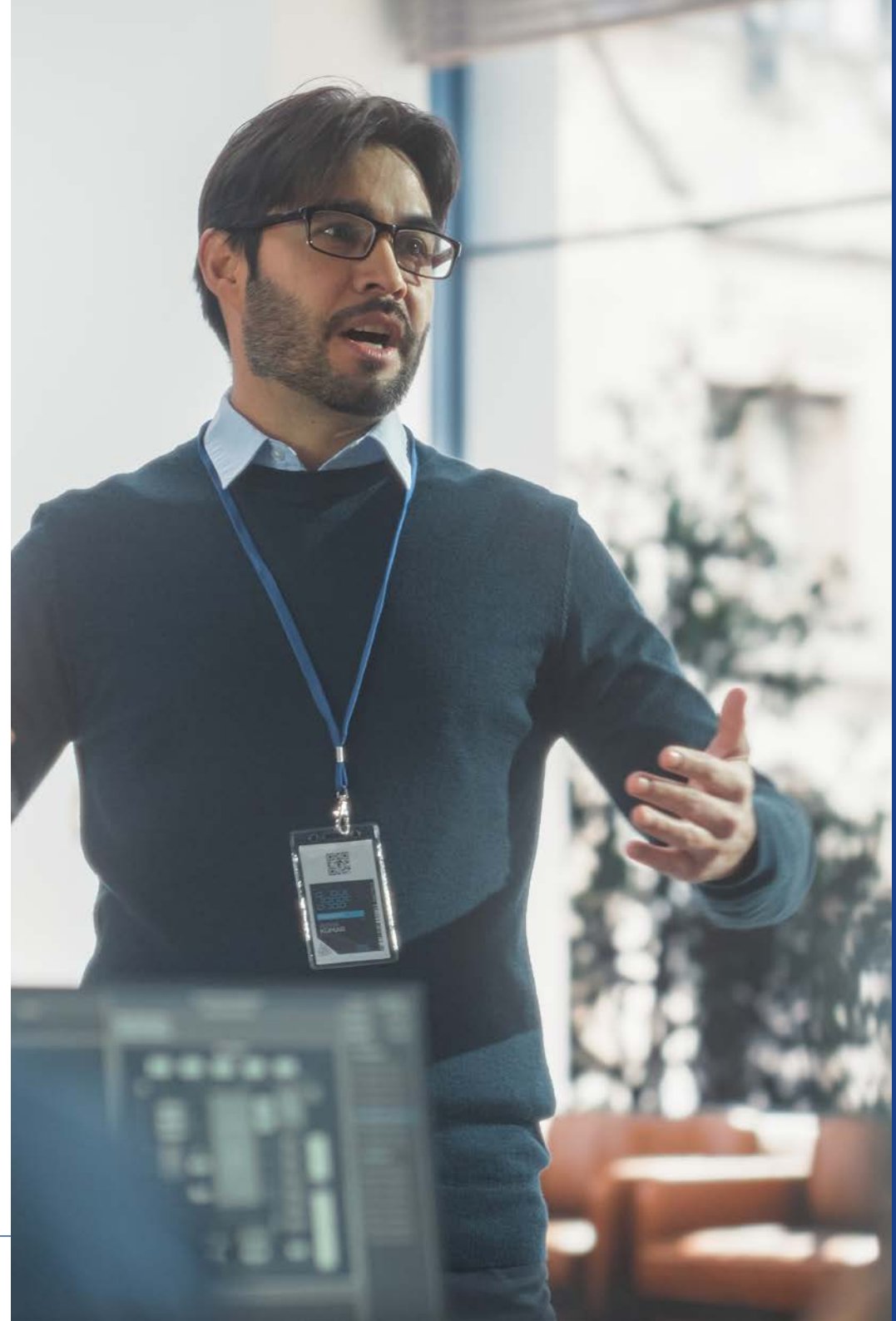
The training activities include the establishment of 12 specialised schools, each specialising in a specific thematic area of the planned spoke. The main thematic areas cover the areas of security of information systems and their virtualisation, the security of technological infrastructures and software, data protection issues, and all aspects related to disinformation and human, social and legal aspects.

OUR TEACHERS

In designing and delivering training, the SERICS Cybersecurity Academy employs highly qualified teachers, tutors, and experts.

Specifically:

- Teachers with years of experience in cybersecurity research and teaching at **universities or ANVUR-accredited research centres**;
- Tutors specialising in cybersecurity training courses;
- Instructional designers, experts in creating cybersecurity training materials;
- Specialists in preparing cybersecurity tests and competitions;
- Experts in designing and implementing training activities with specific experience in the corporate and public sectors.



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TECHNOLOGICAL AND POLITICAL ASPECTS OF CYBERSECURITY

The PhD Summer School on Technology and Politics in Cybersecurity provides a unique interdisciplinary learning opportunity for PhD students and early-stage researchers to explore the complex and changing landscape of digital security. Participants will engage in cutting-edge discussions on the intersection of technology, policy, and society, gaining a comprehensive understanding of the challenges and opportunities in safeguarding cyberspace.

WHEN: Jun 18, 2025 - Jun 21, 2025

WHERE: Monumental Complex of San Pietro, Marsala (Trapani)

DIRECTORS: Giuseppe Lo Re, Giorgio Scichilone

FOR INFORMATION: serics.eu/serics-academy/technological-and-political-aspects-of-cybersecurity



objective

Through expert lectures, common sessions, and peer collaboration, the summer school fosters critical dialogue and equips participants to navigate the multifaceted nature of cybersecurity research.



structure

The program is structured into two specialized tracks. The first track focuses on AI and Cybersecurity, examining how AI is both a tool to strengthen defenses and a vector for new threats. Sessions will cover topics such as AI-based threat detection and adversarial attacks. The second track – which we call cyberpolitics – concerns the link between political institutions and cybersecurity, highlighting the impact of AI on international relations.



- Topic 1** Strengths and Pitfalls in Machine Learning for Cybersecurity - *Speaker:* Giorgio Giacinto
- Topic 2** The challenges facing Europe in the future* - *Speaker:* Giuliano Amato
- Topic 3** Artificial Intelligence and politics: the latest frontier* - *Speaker:* Stefano De Luca
- Topic 4** CyberPolitics: rights, democracy, security* - *Speakers:* Michele Colajanni, Raffaella Brighi, Esmeralda Bucalo, Luana M. Alagna, Giulia Iapichino, Riccardo Allegri
- Topic 5** Surfing, Sailing and Flying in a Vulnerable World - *Speaker:* Alessio Merlo
- Topic 6** Disinformation between cybersecurity and democracy. The case of Romania* - *Speaker:* Alessandro Sterpa
- Topic 7** Nodes and junctions in an interconnected world: skills and issues about eternal competition for power and new technological dynamics* - *Speaker:* Ambasciatore Mario Talò
- Topic 8** XAI in Cybersecurity - *Speaker:* Annalisa Appice
- Topic 9** Safety and gender. Structural dimension of gender-based violence. Stereotypes and social language: project Safely* - *Speakers:* Anna Loretoni e Thomas Casadei
- Topic 10** Security of AI Cybersecurity - *Speaker:* Giuseppina Andresini
- Topic 11** In AI, the 'S' is for Security - *Speaker:* Gabriele Costa
- Topic 12** Network Security, Automation and AI - *Speaker:* Fulvio Valenza
- Topic 13** Panel Istituto Affari Internazionali: "Italy's foreign policy in a changing world: lessons and prospects". Presentation of the Report on Italian Foreign Policy 2024*
Speakers: Nona Mikhelidze, Leo Goretti e Carla Monteleone
- Topic 14** Panel RCS Cy4gate. "Cyberpolitics, difesa dello Stato e sicurezza digitale: nuove minacce, nuovi strumenti" - *Speaker:* Cristina Galoppi
- Topic 15** The politics of technology in a changing world: decision-makers, public opinion, and geopolitical shifts - *Speaker:* Francesco Moro
- Topic 16** Europe and peace: challenges in a changing world* - Marco Tarquinio

details

The technology track will take place from 18 to 21 June 2025 and will be hosted in the Complesso Monumentale di San Pietro in Marsala (Trapani), Sicily. (Maximum 30 applicants will be selected). The cyberpolitics track will start on June 17 in Palermo and will continue from 18 to 21 June 2025 in the Complesso Monumentale di San Pietro in Marsala (Trapani), Sicily. (Maximum 20 applicants will be selected).



CYBERSECURITY AND INTERNATIONAL RELATIONS

The Ph.D. School aims to dig into the intrinsic correlations between cybersecurity and international relations.

WHEN: Jun 30, 2025 – Jul 4, 2025

WHERE: Nautilus - Acquario di Genova (GE) – Italy

DIRECTORS: Alessio Merlo, Fabrizio Coticchia

FOR INFORMATION: serics.eu/serics-academy/cybersecurity-and-international-relations



objective

The school will also provide valuable insights into the role of cybersecurity operations in the Russo-Ukrainian conflict.



structure

Topic 1 The role of cybersecurity in the current international geopolitical landscape

Hours: 5 | Speaker: Elena Kaiser/Massimo Moretti

Topic 2 Responding to Emergencies: Cyber Rapid Reaction Teams in Theory and Practice

Hours: 6 | Speaker: Taylor Grossman

Topic 3 Big Tech and Cyber Conflicts

Hours: 6 | Speaker: Michele Colajanni

Topic 4 Enhancing Cyber Capacity Building in Africa: opportunities & challenges

Hours: 4 | Speaker: Martin Koyabe

Topic 5 Digital Sovereignty: What It Is and the Main Threats to National Cyberspace (ONLINE)

Hours: 2 | Speaker: Roberto Baldoni

Topic 6 War and Non-War Activities in Cyberspace: Theory and Practice

Hours: 4 | Speaker: Dominika Dziwisz



details

Since the subject is vast and complex, the program of the Ph.D. school will specifically focus on analyzing, understanding, discussing, and evaluating the impact of cyber risk on geopolitics from different standpoints, like, e.g., the analysis of cyberattacks from an IR perspective, the impact of cybersecurity on national and international cooperation, human rights and conflict resolution, and the role of private sector on cybersecurity and international relations.



ARTIFICIAL INTELLIGENCE FOR A SECURE SOCIETY – 2ND EDITION OF THE SUMMER SCHOOL

The pervasive influence of social media platforms has undeniably transformed the landscape of contemporary discourse. While these platforms facilitate open discussions on diverse topics, they simultaneously present significant challenges associated with misinformation and the manipulation of public opinion. With the advent of advanced Artificial Intelligence (generative AI) and Large Language Models (LLM), the dissemination of misinformation has become increasingly sophisticated, threatening the integrity of online discourse and eroding trust in institutions and among communities. It is crucial for policymakers, academics, and industry leaders to collectively address these issues.

WHEN: Jul 06, 2025 – Jul 12, 2025

WHERE: Basilianni CDS Hotels in Otranto, Lecce (LE) – Italy

DIRECTORS: Vincenzo Loia, Giuseppe Manco

FOR INFORMATION: serics.eu/serics-academy/artificial-intelligence-for-a-secure-society-2nd-edition-of-the-summer-school



objective

The goal of the summer school on “Artificial Intelligence for a Secure Society” is to empower individuals with the means to foster a more secure communities, both online and offline.



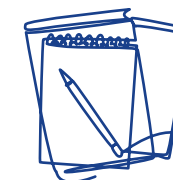
structure

- Topic 1* **Artificial Intelligence: opportunities and risks** | Hours: 1.15 | Speaker: Michela Milano
- Topic 2* **Emergent social conventions and collective bias in LLM populations** | Hours: 1.15 | Speaker: Andrea Baronchelli
- Topic 3* **The Language of Collective Action: Building Solutions in the Digital Era** | Hours: 1.15 | Speaker: Luca Maria Aiello
- Topic 4* **Discover SoBigData: the European Research Infrastructure for social mining** | Hours: 1.15 | Speaker: Roberto Trasarti
- Topic 5* **On Retrieval Augmented Generation and some Unexpected Effects** | Hours: 1.15 | Speaker: Fabrizio Silvestri
- Topic 6* **The Role of Persuasion Techniques in Disinformation Detection** | Hours: 1.15 | Speaker: Giovanni Da San Martino
- Topic 7* **Security and Trust in the Age of the “MindMesh”** | Hours: 1.15 | Speaker: Ettore Ritacco
- Topic 8* **A Quick and Crash Course on Watermarking** | Hours: 3 | Speaker: Luca Caviglione
- Topic 9* **Analyzing and Countering Information Disorder in the Digital Age** | Hours: 3 | Speaker: Domenico Furno
- Topic 10* **Echo Chambers, Polarization and the Role of AI in Online Social Media** | Hours: 3 | Speaker: Matteo Cinelli
- Topic 11* **Large Language Models as Misinformation Detectors: Promise, Pitfalls, and Research Frontiers** | Hours: 3 | Speaker: Marinella Petrocchi
- Topic 12* **Game-theoretic Aspects of Security** | Hours: 3 | Speaker: Cosimo Vinci and Vittorio Bilò
- Topic 13* **Securing the Future: Misinformation, Data Infrastructures, and the AI Lifecycle of Predictive Power** | Hours: 1.15 | Speaker: Mark Coté



details

By gathering experts from diverse fields, the program will tackle pressing challenges through the lens of AI. Participants will learn how artificial intelligence can be used to identify, analyze, mitigate, and counteract various threats, including misinformation, disinformation, fake news, orchestrated online campaigns, and information warfare.



INTERNATIONAL FORENSICS SUMMER SCHOOL (IFOSS)

Forensic Horizons: Investigating the Truth in the Digital and Artificial Intelligence Era.
Challenges and Opportunities in Digital Forensic Analysis, Cybersecurity, and AI-Based Investigations.

WHEN: Jul 13, 2025 - Jul 19, 2025

WHERE: Hotel Village Baia Samuele a Punta Sampieri, Scicli (Ragusa)

DIRECTORS: Sebastiano Battiato

FOR INFORMATION: serics.eu/serics-academy/international-forensics-summer-school-ifoss



objective

The school will be open to about 75 qualified, motivated and pre-selected candidates. Ph. D. students, post-docs, young researchers (both academic and industrial), senior researchers (both academic and industrial) or academic/industrial professionals.



structure

Topic 1 *Speaker:* Sebastiano Battiato

Topic 2 *Speaker:* Donatella Curtotti

Topic 3 **EU AI ACT** | *Hours:* 1.3 | *Speaker:* Giovanni Ziccardi

Topic 4 **Computer Vision and Digital Investigations: from Surveillance Cameras to UAVs** | *Hours:* 1.45 | *Speaker:* Gianluca Foresti

Topic 5 **Truth in judgment, truth in evidence. How to make them compatible in the age of digital Investigations**

Hours: 1 | *Speaker:* Francesco Barlolo Morelli

Topic 6 **A brief introduction to forensic science - definitions - forensic process - casework - RD&I - education - quality**

Hours: 2 | *Speaker:* Andrea Cavallaro

Topic 7 **Reframing the meaning of truth in AI generated content** | *Hours:* 2 | *Speaker:* Laura Ferrarello

Topic 8 **Adversary malware generation: the end of detection?** | *Hours:* 0.45 | *Speaker:* Corrado Aaron Visaggio

Topic 9 **A brief introduction to forensic science - definitions - forensic process - casework - RD&I - education - quality**

Hours: 1.5 | *Speaker:* Didier Meuwly

Topic 10 **Forensic Biometrics: the use of biometric data and databases in forensic applications** | *Hours:* 1.5 | *Speaker:* Didier Meuwly

Topic 11 **Follow the crypto-crimes: legal challenges from investigation to trial** | *Hours:* 0.45 | *Speaker:* Jacopo Della Torre

Topic 12 **Cybersecurity: Two Perspectives, One Goal** | *Hours:* 1 | *Speaker:* Stefano Mele

Topic 13 **Strengths and weaknesses in the use of AI in the forensic field** | *Hours:* 0.45 | *Speaker:* Giovanni Tessitore

Topic 14 **Can we trust the Likelihood Ratio obtained with a black-box model?** | *Hour:* 0.45 | *Speaker:* Giovanni Tessitore

Topic 15 **Black boxes and confirmation bias in media forensics** | *Hours:* 2 | *Speaker:* Fernando Perez Gonzalez

Topic 16 **Fundamentals of Forensic Metrology in a nutshell** | *Hours:* 0.3 | *Speaker:* Gabriella Di Paolo



details

A special session is organized for participants who intend to take advantage of the audience for presenting their current research/tool in the covered areas. A Special Issue to follow up on the themes covered in the School will be published in some indexed high-impact journals (to be announced early). Applicants are particularly encouraged to submit their original research to the SI (the usual refereeing procedure applies to guarantee the highest scientific standards).



INTERNATIONAL SCHOOL ON FOUNDATIONS OF SECURITY ANALYSIS AND DESIGN (FOSAD)

Cybersecurity emerged as one of the most challenging research areas in computer science and engineering. The International School on Foundations of Security Analysis and Design (FOSAD) has been one of the foremost events established with the goal of disseminating knowledge in this critical area.

WHEN: Aug 25, 2025 – Aug 29, 2025

WHERE: Rocca di Bertinoro, Bertinoro (FC) – Italy

DIRECTORS: Fabio Martinelli

FOR INFORMATION: serics.eu/serics-academy/international-school-on-foundations-of-security-analysis-and-design-fosad



objective



Founded in 2000 by prof. Roberto Gorrieri, the aim of the FOSAD school is to offer a good spectrum of current research in foundations of cybersecurity.

structure



Trustworthy AI for system security: Lorenzo Cavallaro (University College London)

Formal Analysis of Security Protocols: State-of-the-art and Future Challenges: Cas Cremers (CISPA Helmholtz Center for Information Security)

ML-based detection of polymorphic hostile behavior in presence of elusion: Ernesto Damiani (Università di Milano)

From malware to resilience: Joaquin Garcia-Alfaro (Institut Polytechnique de Paris)

What's Malicious in Malware? (Automatically) Learning Threat Patterns from Android Applications: Giorgio Giacinto (Università di Cagliari)

The EU AI Act and the Regulatory Sandboxes: Erik Longo (Università di Firenze)

Confidential Computing: Attacks and Defenses: Frank Piessens (KU Leuven)

Authorization Management and Behavioral Modeling in Distributed Cyberphysical Systems: Andrea Saracino (Scuola Universitaria Superiore Sant'Anna, Pisa)

details



Ranging from programming languages to cryptographic protocols, from data and infrastructure protection to software systems security, the course can be of help to graduate students and young researchers from academia or industry who intend to approach the field.

AI-DEFENCE IN THE AI-CYBER-PHYSICAL ENVIRONMENT

As digital technologies permeate every aspect of modern life, safeguarding the security and resilience of our systems, both virtual and physical, has become a critical concern. The growing sophistication of cyber threats, including adversarial machine learning, attacks on autonomous vehicles, and challenges to industrial control systems, poses significant hurdles for researchers, practitioners, and policymakers alike.

WHEN: Sept 1, 2025 – Sept 5, 2025

WHERE: Università di Cagliari (Cagliari) – Italy

DIRECTORS: Giorgio Giacinto

FOR INFORMATION: serics.eu/serics-academy/ai-defence-in-the-ai-cyber-physical-environment



objective



This summer school on “AI-Defense in the AI-Cyber-Physical Environment” brings together cutting-edge research and interdisciplinary insights to equip participants with the essential knowledge and tools to understand and address emerging threats.

structure



Topic 1 Adaptive attacks and Defenses for Robust and Secure AI systems

Speaker: Ilias Tsingenopoulos

Topic 2 Security in generative AI and large language models (LLMs)

Speaker: Lea Schönherr

Topic 3 Human-centered security

Speaker: Maximilian Golla

Topic 4 Security and privacy of cyber-physical systems including autonomous vehicles, drones, and SCADA systems controlling the power grid and other critical infrastructures

Speaker: Alvaro Cardenas

**Topic 5: Robust ML Classifiers for Android Malware Detection
Generative Models for Android Malware Detection
Deterring IP Theft by Generating Fake Data & Documents
ombating Phishing with Generative AI**

details



The curriculum will cover secure and robust AI, vulnerabilities in large language models, human-centered security design, and the protection of cyber-physical infrastructures.

Special emphasis will be placed on the convergence of generative AI and cybersecurity, examining both the risks it creates and its potential as a defensive tool. Through lectures, discussions, and hands-on activities, participants will engage with the leading edge of cybersecurity research and practice.

SECURE SOFTWARE DEVELOPMENT: FROM DESIGN TO IMPLEMENTATION

Digital technologies are integral to our lives. Software is pervasive at every level: from IoT devices running firmware, to cloud systems delivering APIs and services, to cyber-physical systems making decisions and impacting the real world. Ensuring software security is therefore essential to protect our data, safeguard digital identities, and prevent attacks that could have devastating consequences. The complexity of the software ecosystem, with its dependencies on external libraries and tools, has expanded the attack surface, making the software supply chain a potential vector for exploitation.

WHEN: Sept 7, 2025 - Sept 13, 2025

WHERE: San Servolo Residential and Study Centre - Venezia (Italy)

DIRECTORS: Riccardo Focardi

FOR INFORMATION: serics.eu/serics-academy/secure-software-development-from-design-to-implementation



objective



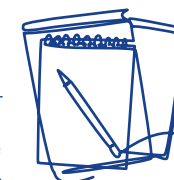
The SERICS doctoral summer school on “Secure Software Development: From Design to Implementation” will focus on advancing secure software development through innovative programming paradigms and formal verification techniques.

structure



- Topic 1 Confidential Computing: Attacks and Defenses**
Hours: 4-5 | Speaker: Frank Piessens (KU Leuven)
- Topic 2 Foundations of Secure Blockchain Programming**
Hours: 4-5 | Speaker: Matteo Maffei (TU Wien)
- Topic 3 Designing Secure Protocols and Proving Them Correct, with Strand Spaces**
Hours: 4-6 | Speaker: Joshua Guttman (MITRE)
- Topic 4 Strands Rocq: Why is a Security Protocol Correct, Mechanically?**
Hours: 4 | Speaker: Riccardo Focardi and Matteo Busi (Ca' Foscari University)
- Topic 5 Rule them all: semantically characterizing vulnerabilities and malware**
Hours: 4 | Speaker: Riccardo Focardi and Matteo Busi (Ca' Foscari University)
- Topic 6 Resource-Aware Programming for Secure Smart Contracts**
Hours: 6 | Speaker: Alvise Spanò

details



Lecturers will cover methods for developing secure-by-design and certified software, as well as strategies for testing and protecting the software supply chain through targeted security analyses and assessments. Practical labs will provide participants with hands-on experience using state-of-the-art software analysis tools.

INFRASTRUCTURE AND IOT SYSTEMS SECURITY

As critical infrastructure and IoT systems become increasingly interconnected and pervasive, ensuring their security and resilience against sophisticated cyber threats and ever-growing cyber-attacks is more vital than ever. The complexity and scale of these systems expose them to diverse vulnerabilities, from targeted cyber-attacks on smart grids and healthcare IoT devices to systematic threats against urban infrastructures and industrial IoT networks. Addressing these challenges demands interdisciplinary knowledge, advanced methodologies, and proactive approaches to cybersecurity.

WHEN: Sept 15, 2025 – Sept 19, 2025

WHERE: Politecnico di Torino (TO) – Italy

DIRECTORS: Stefano Di Carlo

FOR INFORMATION: serics.eu/serics-academy/infrastructure-and-iot-systems-security



objective



The SERICS Doctoral School: Infrastructure and IoT Systems Security offers participants comprehensive training in cutting-edge research and practices, encompassing topics such as securing IoT ecosystems, protection of critical infrastructure, and resilience strategies for interconnected systems.

structure



Topic 1 Security Orchestration in the continuum: Challenges and Opportunities

Speaker: Antonio Skarmeta

Topic 2 Adaptive Artificial Intelligence for concept drift awareness in Cybersecurity

Speaker: Alessandra De Paola

Topic 3 Chaining digital services in multi-ownership environments: from IoT to the the cloud

Speaker: Matteo Repetto

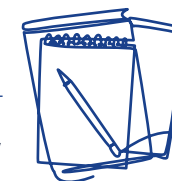
Topic 4 Firmware security for IoT

Speaker: Andrea Continella

Topic 5 A Hybrid Threat Model for Smart Systems

Speaker: Fulvio Valenza

details



Through a combination of lectures, interactive workshops, and practical exercises, participants will engage deeply with contemporary security issues and explore innovative approaches to safeguarding modern infrastructure and IoT deployments. The doctoral school provides an engaging learning environment for PhD students to collaborate, exchange knowledge, and advance the state-of-the-art in infrastructure and IoT systems security.

SECURING DIGITAL TRANSFORMATION: APPROACHES AND TECHNOLOGIES

The digital transformation of society brings unprecedented opportunities, but also new threats that require innovative and interdisciplinary solutions. The school will explore advanced topics such as fuzzing techniques for vulnerability discovery, multimedia forensics for content integrity, and federated learning frameworks with built-in security.

WHEN: Sept 29, 2025 - Oct 7, 2025

WHERE: Sapienza Università di Roma - Dipartimento DIAG, Via Ariosto 25, 00185, Roma

DIRECTORS: Leonardo Querzoni

FOR INFORMATION: serics.eu/serics-academy/security-digital-transformation-approaches-and-technologies



objective



The summer school offers PhD students a comprehensive overview of current research directions in cybersecurity and privacy. By linking these domains to the broader challenge of securing complex digital infrastructures, the school aims to provide participants not only with solid theoretical and practical foundations, but also with valuable insights into the emerging trends and future directions of research in these key areas.

structure



Topic 1 Software fuzzy testing

Speaker: Fabio Tofalini

Topic 2 Multimedia forensics

Speaker: Victor Sanchez

Topic 3 Federated learning and security

Speaker: Jose Luis Hernandez Ramos

Topic 4 Financial Crime Detection with Privacy

Speaker: Zekeriya Erkin

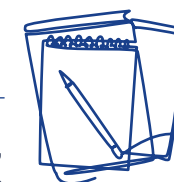
Topic 5 Privacy preserving cryptocurrencies

Speaker: Alessandra Scafuro

Topic 6 Confidential computing

Speaker: Valerio Schiavoni

details



The school will explore advanced topics such as fuzzing techniques for vulnerability discovery, multimedia forensics for content integrity, and federated learning frameworks with built-in security. Additional sessions will focus on privacy-preserving approaches in financial crime detection and secure, anonymous transactions in cryptocurrency systems.

PHD SCHOOL ON ADVANCED HARDWARE SECURITY

The school offers an advanced introduction to key topics in hardware security, combining theoretical, technical, and geopolitical perspectives.

ORGANIZED BY:

Laboratoire TIMA – Grenoble (France)

CINI Cybersecurity National Lab – Turin (Italy)

WHEN: Oct 26, 2025 - Oct 31, 2025

WHERE: Campus of Turin of the International Training Centre of the ILO

DIRECTORS: Giorgio Di Natale, Paolo Prinetto

FOR INFORMATION: serics.eu/serics-academy/phd-school-on-advanced-hardware-security



objective

The program covers crucial subjects such as Physical Unclonable Functions (PUFs), True Random Number Generators (TRNGs), Microelectromechanical Systems (MEMs), testing and security methodologies, side-channel attacks, and fault attacks.



structure

Topic 1 **PUFs**

Speaker: Giorgio Di Natale – Laboratoire TIMA – Grenoble (France)

Topic 2 **TRNGs**

Speaker: Elena Joana VATAJELU – Laboratoire TIMA – Grenoble (France)

Topic 3 **MEMs**

Speaker: Brice Colombier – Univ. Lyon (France)

Topic 4 **Test & Security**

Speaker: Emanuele Valea – CEA-List – Grenoble (France)

Topic 5 **Side Channel Attacks**

Speaker: Francesco Regazzoni – University of Amsterdam (The Netherlands)

Topic 6 **Fault attacks**

Speaker: Paolo Prinetto – CINI Cybersecurity National Lab – Turin (Italy)

Topic 7 **The geopolitical role of Hardware in Security**

Speaker: Nicolò Maunero – IMT – Institute for Advanced Studies Lucca (Italy)

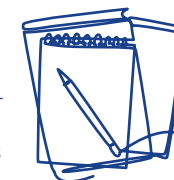
Topic 8 **Hands-on experiences & CTF (Capture-the-Flag) Challenges Speaker**

Speaker: Roberto Baldoni – Agenzia per la Cybersicurezza Nazionale – ACN, Washington DC (USA)



details

Special attention will be given to the strategic role of hardware in global security, with practical sessions and Capture-the-Flag (CTF) challenges designed to foster hands-on learning.



FRONTIERS OF CYBERSECURITY

“Frontiers of Cybersecurity” is an intensive five-day PhD School that immerses doctoral candidates in the most urgent research challenges of digital defense.

WHEN: Nov 24, 2025 - Nov 28, 2025

WHERE: IMT Lucca

DIRECTORS: S. Soderi, R. De Nicola, A. Armando, M. Tribasone

FOR INFORMATION: serics.eu/serics-academy/frontiers-of-cybersecurity



objective

Combining deep academic insight with experimental problem-solving, the school equips the next generation of cybersecurity scholars with cutting-edge knowledge, practical expertise, and a dynamic peer network committed to protecting tomorrow's digital world.



structure

Each morning, internationally recognized experts deliver keynote lectures exposing participants to state-of-the-art theory, emerging threats, and open scientific problems across themes ranging from AI-powered scientific discovery and rapid incident response to protecting space infrastructures, quantum-era security, and information security challenges related to the finance sector.



Topic 1 **AI for science**

Topic 2 **Incident Handling**

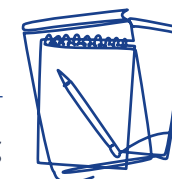
Topic 3 **Space Security**

Topic 4 **Quantum**

Topic 5 **Finance**

details

Afternoons shift to hands-on technical exercises and lightning research talks by the students, turning concepts into practice and sharpening critical-thinking skills.



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SECURITY AND RIGHTS IN THE CYBERSPACE