

2025 IEEE CSR Workshop on Cyber Resilience and Economics (CRE)

Call for Papers

Important dates

Paper submission deadline:

April 14, 2025

Authors' notification:

May 5, 2025

Camera-ready submission:

May 26, 2025

Registration deadline (authors):

May 26, 2025

Workshop dates:

August 4–6, 2025

The IEEE CSR CRE workshop explores the foundational and applied advances in cyber resiliency strategies, policies, and technologies to shift the balance in favor of the defender, ensure critical processes continue to operate in face of a successful cyber-attack, and identify and quantify the effect economic realities have on the decision processes. At the top level, national and organizational strategies and policies are needed to understand what is to be achieved and the resources to be made available to protect critical resources and infrastructures. Strategies and policies must be supported by security and resiliency technologies. As a result, in addition to exploring various strategies, the workshop will seek to understand the capabilities, strengths/weaknesses, and benefits of various technologies whether existing or in research. This includes the incorporation of new technologies that are not resilience-focused but still have significant impact on a system's ability to continue to operate in face of attack. Such examples include artificial intelligence and machine learning that can be used by defenders and attackers to impact the asymmetric balance.

Workshop chairs

Nicholas J. Multari (US)

Rosalie McQuaid (US)

Organizing committee

George Sharkov (BG)

Volkmar Lotz (FR)

Elena Peterson (US)

Kelly McSweeney (US)

Technical program committee

Michael Atighetchi (US)

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Marco Vieira (US)

Chris Walter (US)

- › Cyber resiliency strategies and policies
- › Cyber resilience research focused on OT/IT solutions
- › Alignment of technical and mission resilience
- › Cyber resilience in OT environments: strengths and weaknesses
- › Metrics and measurements for resilience
- › Resilience and security mutual support
- › Development of true pre-emptive cyber resilience
- › AI/ML and its effects on the defender and the adversary as related to cyber resilience
- › Economics of cyber resiliency including examining economic models to determine return on investments
- › Technical/economic barriers to implementation

The workshop focuses on the parameters needed to accurately quantify asymmetric imbalance from the offensive and defensive perspective; examine technical and non-technical approaches to shifting that balance, including the full range of costs/benefits of each approach; explore and evaluate a range of options for defining and achieving optimality. It will bring together a diverse group of experts from multiple fields to advance the above concepts.

The workshop will be held in conjunction with the IEEE CSR 2025 conference as a **physical event**, during August 4–6, 2025. Prospective authors are encouraged to submit previously unpublished contributions from a broad range of topics, which include but are not limited to the following:

The IEEE CSR CRE workshop will accept high-quality research papers presenting strong theoretical contributions, applied research and innovation results obtained from funded cyber-security and resilience projects, and industrial papers that promote contributions on technology development and contemporary implementations.

Submitted manuscripts should not exceed 6 pages (plus 2 extra pages, being subject to overlength page charges) and should be of sufficient detail to be evaluated by expert reviewers in the field. Accepted papers will be submitted for inclusion into IEEE Xplore subject to meeting IEEE Xplore's scope and quality requirements. Detailed information about paper submission and guidelines for authors can be found at the workshop's website <https://www.ieee-csr.org/cre>.

Publicity chairs

Elena Peterson (US)

Kelly McSweeney (US)

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