

# TechFusion 2025 - AI, Cybersecurity, and Emerging Trends in Computer Sciences

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## AI, Data, and Security: Shaping the Future of Intelligent and Trusted Systems

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### Abstract:

Security, Decision-Making, and Self-Healing Systems: Artificial Intelligence (AI) is transforming how we secure, manage, and trust the digital world. This session explores the convergence of AI, data, and cybersecurity in creating intelligent and self-healing cloud systems. Drawing from real-world implementations, it highlights how Generative AI, machine learning, and deep learning are powering autonomous threat detection, predictive remediation, and adaptive decision-making in hybrid cloud environments. As cyber risks evolve faster than human response, AI-driven observability and automation are redefining resilience - enabling infrastructures that can learn, adapt, and recover in real time. The talk reveals how emerging models such as LLMs and GANs drive this shift from reactive defense to proactive trust. Attendees will gain insight into the next frontier of autonomous, explainable, and data-centric security shaping the intelligent systems of tomorrow.