

## Special Issue

# Next-Generation IoT Ecosystems: Methods, Challenges and Prospects

### Message from the Guest Editors

The rapid evolution of the Internet of Things (IoT) has been shaped by the convergence of cloud, edge, and fog computing, enabling scalable, distributed, and intelligent infrastructures. With the integration of Applied Artificial Intelligence (AI), new opportunities are emerging across diverse domains such as smart cities, healthcare, and agriculture. Applied AI enhances IoT ecosystems by empowering security frameworks, vision-based analytics, robotics, and digital twin technologies, thus driving innovation toward more sustainable and resilient societies.

This Special Issue aims to provide a platform for cutting-edge research contributions at the intersection of IoT architectures and AI-driven intelligence. We seek original research, surveys, and application-driven studies that explore novel methodologies, system designs, and case studies leveraging IoT layer synergies with AI. The focus is on advancing next-generation IoT ecosystems where applied AI plays a central role in addressing challenges of scalability, latency, trust, and cross-domain integration.

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### Deadline for manuscript submissions

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