The Sixteenth International Conference on Adaptive and Self-Adaptive Systems and Applications
ADAPTIVE 2024
April 14 - 18, 2024 - Venice, Italy
http://www.iaria.org/conferences2024/ADAPTIVE24.html

Important deadlines:
- Submission (full paper): January 8, 2024
- Notification: February 18, 2024
- Registration: March 4, 2024
- Camera ready: March 14, 2024

Tracks:

Trends in adaptive and self-adaptive systems
- Collective adaptation and self-adaptation
- Adaptive mechanisms in social computing
- Self-adaptive cloud architectures
- Adapting workflows in networked clouds
- Adaptive algorithms in 5G Cloud networks
- Automatic cloud adaptation
- Automated cloud brokerage
- Context-aware adaptation
- and self-adaptation for Smart cities
- Self-Protective multi-Cloud applications
- Socially-driven and self-organizing cloud networking
- SLA agreements optimization via autonomous agents
- Self-adaptation in mobile environments
- Adaptive mechanisms in Internet of Things (IoT) and IoD (Internet of Drones)
- Adaptation in data-centric control
- Self-Society
- Adaptation in large scale systems
- Self-optimization in Software-Defined Networks (SDN)
- Self-aware adaptation for analyzing big data
- Self-adaptation in high-speed signals processing
- Self-adapting e-Health systems

Fundamentals and design of adaptive systems
- Fundamentals on adaptive and self-adapting systems
- Frameworks and architectures for adaptive supporting platforms
- Architectures for adaptive applications
- Specification of adaptive behavior
- Specification of adaptive structures and topologies
- Design and implementation of adaptive components
- Composition of adaptive behaviors and structures
- Adaptive individual and collective behavior and structures
- Adaptive deterministic and non-deterministic behavior
- Semantic modeling

Adaptive entities
- Adaptive environments
- Adaptive hardware configurations
- Adaptive software applications
- Adaptive protocols
- Adaptive algorithms
- Adaptive and interactive interfaces
- Adaptive filters
- Adaptive clock speeds
- Adaptive schedulers
- Adaptive load balancers

Adaptive mechanisms
- Adaptive real-time strategies
- Learning-based adaptive strategies
- Adaptive mechanisms (trees, ant algorithms, fuzzy-logic, etc.)
- Agent based-adaptive mechanisms
- Policy-based adaptation
- Feedback-based adaptive systems
- Context-aware adaptation
- User-aware adaptation

Adaptive applications
- Adaptive artificial intelligence in computer wargames
- Intelligent complex adaptive systems
- Adaptive virtualization
- Adaptive social networks
- Adaptive entertainment applications
- Adaptive disaster recovery systems
- Anticipative adaptive systems
- Fault-tolerant adaptive systems
- Adaptive ad hoc networks
- Application domains, e.g., building (AEC projects, simulation models, facility management), tourism, etc.
- Adaptive economic applications (finance, stock exchange, regulatory decisions, etc.)
- Adaptive vehicular traffic

Adaptivity in robot systems
- Adaptive robot behavior
- Self-organization and emergence
- Flexible and reconfigurable robot structures
- Adaptation in collective and swarm robotics

Self-adaptation
- Theory of self-adaptation and control
- Self-adaptive networks, systems, and applications
- Self-adaptive services
- Self-adaptive behavior and topology/structure
- Specification of self-adaptive behavioral control

Self-adaptation applications
- Self-monitoring and self-management
- Self-configuration, self-healing, self-management
- Self-defense, self-protection, self-diagnosis
- Self-adaptation of overlay networks
- Self-adaptation in ad hoc sensor networks
- Context-aware self-adaptation of networks and services

Computational Trust for Self-Adaptive Systems
- Trust models for adaptive systems
- Trust models for self-organizing and autonomies systems
- Agent-based trust models for cooperation
- Privacy and Security in self-organizing and adaptive systems
- Human and social factors involved in trust and adaptation
- Applications of trust and security on adaptive systems, with a focus on web-based applications, social networks, social search
- Trust models for self-organizing systems of information (wikis, forums, blogs.)
- Trust and personalization for enabling adaptation
- Models for learning trust and the evolution of trust
- Decentralized trust models
- Case studies
- Theoretical trust models for self-adaptation

Assurances and metrics for adaptive and self-adaptive systems
- Quality assurance of (self-x) mechanisms
- Stability and convergence
- Optimal (self-) adaptation
- Accuracy validation of (self-) adaptation
- Verification
- Testing real-time (self-) adaptive performance
- Performance analysis of (self-x) mechanisms