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The Thirteenth International Conference on Adaptive and Self-adaptive Systems and Applications

ADAPTIVE 2021

April 18 - 21, 2021 - Porto, Portugal

<http://www.aria.org/conferences2021/ADAPTIVE21.html>

Important deadlines:

Submission (full paper)	February 8, 2021
Notification	February 28, 2021
Registration	March 11, 2021
Camera ready	March 16, 2021

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 autonomic 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