**IARIA**

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**The Tenth International Conference on Advanced Cognitive Technologies and Applications**
**COGNITIVE 2018**
**February 18 - 22, 2018 - Barcelona, Spain**
http://www.iaria.org/conferences2018/COGNITIVE18.html

**Important deadlines:**

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| Submission (full paper) | October 1, 2017 |
| Notification | December 3, 2017 |
| Registration | December 17, 2017 |
| Camera ready | January 15, 2018 |

**Tracks:**

**NEW DIRECTIONS: Hot topics on cognitive science**

Neuroscience; Brain connectivity; Brain-like Computing; Neuromorphic computing; Neuromorphic devices; Brain machine interface; Interfacing via brain waves; Spiking hierarchical models; Vision sensors; Sensory modalities; Temporal approach to object recognition; Hierarchical temporal memory; Spatio-temporal event recognition; Reasoning with relative directions; Web-navigation via Cognitive Models; Mining cognitive patterns; Bag-of-Features for retrievals; Computing with symmetries; Periphery of Knowledge; Emotions and cooperation levels

**BRAIN: Brain information processing and informatics**

Cognitive and computation models; Human reasoning mechanisms; Modeling brain information processing mechanisms; Brain learning mechanisms; Human cognitive functions and their relationships; Modeling human multi-perception mechanisms and visual, auditory, and tactile information processing; Neural structures and neurobiological process; Cognitive architectures; Brain information storage, collection, and processing; Formal conceptual models of human brain data; Knowledge representation and discovery in neuroimaging; Brain-computer interface; Cognition-inspired complex systems; Aesthetic emotions

**COGNITION: Artificial intelligence and cognition**

Expert systems, knowledge representation and reasoning; Reasoning techniques, constraint satisfaction and machine learning; Logic programming, fuzzy logic, neural networks, and uncertainty; State space search, ontologies and data mining; Games, planning and scheduling; Natural languages processing and advanced user interfaces; Cognitive, reactive and proactive systems; Ambient intelligence, perception and vision; pattern recognition

**AGENTS: Agent-based adaptive systems**

Agent frameworks and development platforms; Agent models and architectures; Agent communication languages and protocols; Cooperation, coordination, and conversational agents; Group decision making and distributed problem solving; Mobile, cognitive and autonomous agents; Task planning and execution in multi-agent systems; Security, trust, reputation, privacy and safety in agent-based systems; Negotiation brokering and matchmaking in agent-oriented protocols; Web-oriented agents (mining, semantic discovery, navigation, etc.; SOA and software agents; Economic agent models and social adoption

**AUTONOMY: Autonomous systems and autonomy-oriented computing**

Self-organized intelligence nature-inspired thinking paradigms; Swarm intelligence and emergent behavior; Autonomy-oriented modeling and computation; Coordination, cooperation and collective group behavior; Agent-based complex systems modeling and development; Complex behavior aggregation and self-organization; Agent-based knowledge discovery and sharing; Autonomous and distributed knowledge systems; Autonomous knowledge via information agents; Ontology-based agent services; Knowledge evolution control and information filtering agents; Natural and social law discovery in multi-agent systems; Distributed problem solving in complex and dynamic environments; Auction, mediation, pricing, and agent-based market-places; Autonomous auctions and negotiations

**APPLICATIONS**

Agent-oriented modeling and methodologies; Agent-based interaction protocols and cognitive architectures; Emotional modeling and quality of experience techniques; Agent-based assistants and e-health; Agent-based interfaces; Knowledge and data intensive classification systems; Agent-based fault-tolerance systems; Learning and self-adaptation via multi-agent systems; Task-based and task-oriented agent-based systems; Agent-based virtual enterprise; Embodied agents and agent-based systems applications; Agent-based perceptive animated interfaces; Agent-based social simulation; Socially planning; E-Technology agent-based ubiquitous services and systems