

## Topics of Interest

High-quality original submissions are welcome from all areas of contemporary AI; the following list of topics is indicative only.

- Agents & Multi-agent systems
- Agent Communication Languages & Protocols
- Argumentation
  
- Auctions & Mechanism Design
- Coalition Formation
- Computational Social Choice
- Cooperation & Coordination
- Game-Theoretic & Economic Foundations
- Negotiation
- Programming Languages & Environments for MAS
- Trust
  
- Case-Based Reasoning
- Adaptation
- Analogical Reasoning
  
- Applications of CBR
- Case Representation
- Case Retrieval
- Explanation
  
- Cognitive Modeling & Interaction
- AI & Creativity
- Ambient Intelligence
- Artificial Life
- Emotions
  
- Human-Computer Interaction
- Human Experimentation
- Instruction & Teaching
- Intelligent User Interfaces
- Memory
- Neuroscience
- Perception & Performance
- Personalisation & User Profiling
- Philosophical Foundations
- Recommender Systems
  
- Skill Acquisition & Learning
- User & Context Modelling
- Usage Analysis & Usage Mining
- Web Usability & Accessibility
  
- Constraints & Search
- Anytime Search
- Constraint Optimisation
- Constraint Programming
- Constraint Propagation
- Constraint Satisfaction
- Distributed Constraint Solving
- Global Constraint
  
- Logic & Constraint Programming
- Modelling
  
- Satisfiability
- Soft Constraints
- User Interaction

- Knowledge Representation and Reasoning
  - Abductive & Inductive Reasoning
  - Answer Set Programming
  - Automated Theorem Proving
  - Belief Revision
  - Causality
  - Common-Sense Reasoning
  - Decision Making
- Description Logics
- Logical Foundations
- Logic Programming
- Modal Logics
- Model Checking
- Non-Classical Logics
- Nonmonotonic Reasoning
- Ontologies & Ontology Languages
- Preferences
- Reasoning about Actions & Change
- Resource-Bounded Reasoning
- Semantic Web
- Spatial Reasoning
- Temporal Reasoning
- Verification & Validation
- Machine Learning
  - Adaptive Systems
  - Bayesian Learning
  - Clustering
  - Data Mining
  - Decision Tree & Rule Learning
  - Dimension Reduction
  - Ensemble Methods
  - Evolutionary Computing
  - Information Extraction
  - Kernel Methods
  - Knowledge Discovery
  - Machine Learning Applications
  - Multiagent Learning
  - Neural Networks
  - Reinforcement Learning
  - Unsupervised Learning
- Model-Based Reasoning
  - Causal Reasoning
  - Diagnosis, Testing & Repair
  - Design & Configuration
  - Model-Based Reasoning & Diagnosis
- Model-Based Systems
  - Qualitative Reasoning
  - Real-Time Systems
  - Natural Language Processing
    - Computational Morphology & Parsing
    - Computational Semantics & Pragmatics
    - Corpus-Based Language Models
    - Evaluation Methods for NLP
  - Intelligent Conversational Agents
  - Intelligent Information Retrieval
- Lexicons & Ontologies
- Linguistic Knowledge Acquisition & Discovery

- Machine Learning for NLP
- Opinion Mining & Sentiment Analysis
- Paraphrasing & Textual Entailment
- Psycholinguistics
- Semantic Search & Question Answering
- Spoken & Multimodal Dialogue Systems
- Text Mining & Information Extraction
- Perception and Sensing
- Active Vision & Sensory Planning
- Image Processing
- Model-Based Vision
- Motion, Flow & Tracking
- Object Recognition
- Programming Environments & Languages
- Statistical Models & Visual Learning
- Task Planning & Execution
- Planning and Scheduling
- Applications of Planning & Scheduling
- Classical Planning
- Constraint-Based Planning & Scheduling
- Heuristics for Planning
- Hierarchical Planning & Scheduling
- Interactive Planning & Scheduling
- Knowledge Engineering for Planning & Scheduling
- Markov Decision Processes
- Planning & Learning
- Planning with Incomplete Information
- Planning with Uncertainty
- POMDPs
- Temporal Planning & Scheduling
- Robotics
- Autonomous Systems
- Estimation & Learning for Robotic Systems
- Exploration
- Human-Robot Interaction
- Localisation
- Motion Planning
- Multi-Robot Systems
- Robot Architectures
- Robot Navigation
- Robot Programming Environments & Languages
- Search & Rescue Robots
- Sensory Planning
- Service Robots
- Task Planning
- Viewpoints & Modality Selection
- Uncertainty in AI
- Bayesian Networks
- Belief Revision & Update
- Conceptual Graphs
- Graphical Models
- Probabilistic Reasoning
- Ranking
- Applications of AI
- AI & Autonomous Vehicles
- AI & Education
- AI & Life Sciences/Medicine

- AI & the Internet
- AI & the Semantic Web
- AI & Sensor Networks