



9th Hellenic Conference on Artificial Intelligence

18-20 May, 2016

Grand Hotel Palace Thessaloniki

Conference Program



Aristotle University of Thessaloniki
Research Committee



Wednesday, 18/5/2016

08:30-09:30	<i>Registration</i>	
09:30-13:00	AI-IOT Patoulidou A Workshop on Artificial Intelligence and Internet of Things	AI4SG Patoulidou B Workshop on AI for the Smart Grid
13:00-14:20	Lunch Break	
14:20-14:30	Welcome address by the chairs Patoulidou A	
14:30-15:30	Keynote 1 Patoulidou A Session chair: Ioannis Vlahavas Developmental Robotics for Embodied Language Learning <i>Angelo Cangelosi</i>	
15:30-16:00	Coffee Break	
16:00-18:00	Session CSP Patoulidou A Session chair: Ilias Sakellariou <i>Efficiently Reasoning about Qualitative Constraints through Variable Elimination</i> Michael Sioutis, Zighuo Long and Sanjiang Li <i>Using Parallelization to Efficiently Exploit the Pruning Power of Strong Local Consistencies,</i> Minas Dasygenis and Kostas Stergiou <i>Extending the Broken Triangle Property tractable class of binary CSPs,</i> Wady Naanaa <i>A constrained molecular graph generation with imposed and forbidden fragments (short),</i> Omrani Mohamed Amine and Wady Naanaa <i>Constraint Programming MapReduce'd (short)</i> Nikolaos Pothitos and Panagiotis Stamatopoulos	Session Pattern Recognition Patoulidou B Session chair: Nikos Nikolaidis <i>A Real-Time Approach for Gesture Recognition using the Kinect Sensor (short)</i> Georgios Paraskevopoulos, Evaggelos Spyrou and Dimitrios Sgouropoulos <i>Complex layout analysis based on contour classification and morphological operations (short)</i> Nikos Vasilopoulos and Ergina Kavallieratou <i>Distance Measurement of Objects using Stereo Vision (short)</i> Mozammel H Chowdhury, Junbin Gao and Rafiqul Islam GREEK SIGN LANGUAGE RECOGNITION USING THE LEAP MOTION DEVICE (short) Merkourios Simos and Nikolaos Nikolaidis <i>Automatic Forest Wood Logging Identification based on Acoustic Monitoring (short)</i> Iosif Mporas and Michael Paraskevas <i>Real-time Bite Detection from Smartwatch Orientation Sensor Data (short)</i> Christos Maramis, Vasilis Kilintzis and Nicos Maglaveras
18:30-20:30	Welcome Reception	

Note: Full papers are scheduled for approximately 20 minutes presentation followed by 5 minutes Q&A. Short papers are scheduled for approximately 12 minutes presentation followed by 3 minutes Q&A

Thursday, 19/5/2016

09:30-10:30	<p>Keynote 2 Patoulidou A</p> <p>Session chair: Grigorios Tsoumakas</p> <p>On the understandability of rule learning <i>Johannes Fürnkranz</i></p>	
Coffee Break		
11:00-13:00	<p>Session AI Applications Patoulidou A</p> <p>Session chair: Stasinou Kostantopoulos</p> <p><i>A Semantic Annotation Model for Arabic Legal Texts</i> Ines Berrazega, Rim Faiz, Asma Bouhafs and Ghassan Mourad</p> <p><i>A Semantic Approach to Film Content Analysis and Retrieval</i> Alexandros Chortaras, Stefanos Kollias, Kostas Rapantzikos and Giorgos Stamou</p> <p><i>Artificial Intelligence meets Software Engineering in Computing Education</i> Dimitris Kalles</p> <p><i>ReSkill: Relative Skill-Level Calculation System (short)</i> Chairi Kiourt, George Pavlidis and Dimitris Kalles</p>	<p>Session ML-1 Patoulidou B</p> <p>Session chair: Anastasios Tefas</p> <p><i>Improving Text Stream Clustering using Term Burstiness and Co-burstiness</i> Argyris Kalogeratos, Panagiotis Zagorisis and Aristidis Likas</p> <p><i>Ensemble Feature Selection using Rank Aggregation Methods for Population Genomic Data (short)</i> Ioannis Kavakiotis, Alexandros Triantafyllidis, Grigorios Tsoumakas and Ioannis Vlahavas</p> <p><i>Content Representation and Similarity of Movies based on Topic Extraction from Subtitles</i> Konstantinos Bougiatiotis and Theodoros Giannakopoulos</p> <p><i>Detecting hyperplane clusters with adaptive possibilistic clustering</i> Konstantinos Koutroumbas, Spyridoula Xenaki and Athanasios Rontogiannis</p> <p><i>Clustering Software Metric Values Extracted from C# Code for Maintainability Assessment (short)</i> Shumail Arshad and Christos Tjortjis</p>
Lunch Break		
14:30-15:30 Robotic Demonstration		
Coffee Break		
16:00-18:00	<p>Session Search Patoulidou A</p> <p>Session chair: Ioannis Refanidis</p> <p><i>Towards a validator for planning problems</i> Moses Symeonidis, Dimitris Giouroukis and Dimitris Vrakas</p> <p><i>Grid Search for Operator and Parameter Control in Differential Evolution</i> Vasileios Tatsis and Konstantinos Parsopoulos</p> <p><i>Piece of Pie Search: Confidently Exploiting Heuristics</i> Nikolaos Pothitos and Panagiotis Stamatopoulos</p> <p><i>A Neo4j Implementation of Fuzzy Random Walkers</i> Georgios Drakopoulos, Andreas Kanavos and Athanasios Tsakalidis</p>	<p>Session ML-2 Patoulidou B</p> <p>Session chair: Dimitris Kalles</p> <p><i>A Bag of Words approach for recognition of Greek folk dances (short)</i> Eftychia Fotiadou, Ioannis Kapsouras, Nikos Nikolaidis and Anastasios Tefas</p> <p><i>Spectral Clustering using Optimized Bag-of-Features</i> Nikolaos Passalis and Anastasios Tefas</p> <p><i>Segmento: An R-based Visualization-rich System for Customer Segmentation and Targeting (short)</i> Anestis Fachantidis, Athanasios Tsiaras, Grigorios Tsoumakas and Ioannis Vlahavas</p> <p><i>Classifier-assisted optimization frameworks</i> Yoel Tenne</p> <p><i>Short-Term Load Forecasting using a Cluster of Neural Networks for the Greek Energy Market</i> Apostolos Adamakos and Michalis Titsias</p>
21:00 Conference Dinner		

Friday, 20/5/2016

09:30-11:00	<p>Tutorial Patoulidou A</p> <p>Session chair: Antonis Bikakis</p> <p>Cooperative Games in Multiagent Systems <i>Georgios Chalkiadakis</i></p>		
11:00-11:30	<p>CoffeeBreak</p>		
11:30-13:30	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>Session Agents Patoulidou A</p> <p>Session chair: Panagiotis Stamatopoulos</p> <p><i>Autonomous navigation of an over-actuated marine platform using reinforcement learning</i> Konstantinos Tziortziotis, Nikolaos Tziortziotis, Kostas Vlachos and Konstantinos Blekas</p> <p><i>Energy Management in Solar Microgrid via Reinforcement Learning</i> Panagiotis Kofinas, George Vouros and Anastasios Dounis</p> <p><i>Modeling and Enactment of Business Agents in AgentSpeak</i> Amelia Badica, Costin Badica and Florin Leon</p> <p><i>EVLlib: A Library for the Management of the Electric Vehicles in the Smart Grid (short)</i> Sotiris Karapostolakis, Emmanouil Rigas, Nick Bassiliades and Sarvapali Ramchurn</p> <p><i>Simultaneous Localisation and Mapping to Reach Linguistically-Defined Targets (short)</i> Charalambos Rossides and Stasinios Konstantopoulos</p> </td> <td style="width: 50%; vertical-align: top;"> <p>Session NN & Evolutionary Alg. Patoulidou B</p> <p>Session chair: Ergina Kavallieratou</p> <p><i>Hybrid Evolutionary Algorithms in Resource Leveling Optimization: Application in a Large Real Construction Project of a 50000 DWT Ship</i> Aggelos Gaitanidis, Vassilios Vassiliadis, Christos Kyriklidis and Georgios Dounias</p> <p><i>Evolving Multi-Layer Neural Networks for Othello</i> Vassilis Makris and Dimitris Kalles</p> <p><i>Relevance Feedback in Deep Convolutional Neural Networks for Content Based Image Retrieval</i> Maria Tzelepi and Anastasios Tefas</p> <p><i>Determination of a new formula for the electrical fast transient / burst waveform using genetic algorithm</i> Markos Georgopoulos, Ioannis Gonos and Ioannis Stathopoulos</p> <p><i>Efficient MapReduce Kernel k-Means for Big Data Clustering</i> Nikolaos Tsapanos, Anastasios Tefas, Nikolaos Nikolaidis and Ioannis Pitas</p> </td> </tr> </table>	<p>Session Agents Patoulidou A</p> <p>Session chair: Panagiotis Stamatopoulos</p> <p><i>Autonomous navigation of an over-actuated marine platform using reinforcement learning</i> Konstantinos Tziortziotis, Nikolaos Tziortziotis, Kostas Vlachos and Konstantinos Blekas</p> <p><i>Energy Management in Solar Microgrid via Reinforcement Learning</i> Panagiotis Kofinas, George Vouros and Anastasios Dounis</p> <p><i>Modeling and Enactment of Business Agents in AgentSpeak</i> Amelia Badica, Costin Badica and Florin Leon</p> <p><i>EVLlib: A Library for the Management of the Electric Vehicles in the Smart Grid (short)</i> Sotiris Karapostolakis, Emmanouil Rigas, Nick Bassiliades and Sarvapali Ramchurn</p> <p><i>Simultaneous Localisation and Mapping to Reach Linguistically-Defined Targets (short)</i> Charalambos Rossides and Stasinios Konstantopoulos</p>	<p>Session NN & Evolutionary Alg. Patoulidou B</p> <p>Session chair: Ergina Kavallieratou</p> <p><i>Hybrid Evolutionary Algorithms in Resource Leveling Optimization: Application in a Large Real Construction Project of a 50000 DWT Ship</i> Aggelos Gaitanidis, Vassilios Vassiliadis, Christos Kyriklidis and Georgios Dounias</p> <p><i>Evolving Multi-Layer Neural Networks for Othello</i> Vassilis Makris and Dimitris Kalles</p> <p><i>Relevance Feedback in Deep Convolutional Neural Networks for Content Based Image Retrieval</i> Maria Tzelepi and Anastasios Tefas</p> <p><i>Determination of a new formula for the electrical fast transient / burst waveform using genetic algorithm</i> Markos Georgopoulos, Ioannis Gonos and Ioannis Stathopoulos</p> <p><i>Efficient MapReduce Kernel k-Means for Big Data Clustering</i> Nikolaos Tsapanos, Anastasios Tefas, Nikolaos Nikolaidis and Ioannis Pitas</p>
<p>Session Agents Patoulidou A</p> <p>Session chair: Panagiotis Stamatopoulos</p> <p><i>Autonomous navigation of an over-actuated marine platform using reinforcement learning</i> Konstantinos Tziortziotis, Nikolaos Tziortziotis, Kostas Vlachos and Konstantinos Blekas</p> <p><i>Energy Management in Solar Microgrid via Reinforcement Learning</i> Panagiotis Kofinas, George Vouros and Anastasios Dounis</p> <p><i>Modeling and Enactment of Business Agents in AgentSpeak</i> Amelia Badica, Costin Badica and Florin Leon</p> <p><i>EVLlib: A Library for the Management of the Electric Vehicles in the Smart Grid (short)</i> Sotiris Karapostolakis, Emmanouil Rigas, Nick Bassiliades and Sarvapali Ramchurn</p> <p><i>Simultaneous Localisation and Mapping to Reach Linguistically-Defined Targets (short)</i> Charalambos Rossides and Stasinios Konstantopoulos</p>	<p>Session NN & Evolutionary Alg. Patoulidou B</p> <p>Session chair: Ergina Kavallieratou</p> <p><i>Hybrid Evolutionary Algorithms in Resource Leveling Optimization: Application in a Large Real Construction Project of a 50000 DWT Ship</i> Aggelos Gaitanidis, Vassilios Vassiliadis, Christos Kyriklidis and Georgios Dounias</p> <p><i>Evolving Multi-Layer Neural Networks for Othello</i> Vassilis Makris and Dimitris Kalles</p> <p><i>Relevance Feedback in Deep Convolutional Neural Networks for Content Based Image Retrieval</i> Maria Tzelepi and Anastasios Tefas</p> <p><i>Determination of a new formula for the electrical fast transient / burst waveform using genetic algorithm</i> Markos Georgopoulos, Ioannis Gonos and Ioannis Stathopoulos</p> <p><i>Efficient MapReduce Kernel k-Means for Big Data Clustering</i> Nikolaos Tsapanos, Anastasios Tefas, Nikolaos Nikolaidis and Ioannis Pitas</p>		
13:30-15:00	<p>LunchBreak</p>		
15:00-16:00	<p>EETN General Assembly</p>		
16:00-17:00	<p>Session NECTAR Patoulidou A</p> <p>Session chair: George Vouros</p> <p><i>Engineering Ambient Intelligence Systems using Agent Technology. IEEE Intelligent Systems</i> Nikolaos Spanoudakis and Pavlos Moraitis</p> <p><i>Constraint-based Causal Discovery from Multiple Interventions over Overlapping Variable Sets, Journal of Machine Learning Research</i> Sofia Triantafillou and Ioannis Tsamardinos</p>		
17:00-17:15	<p>SETN conclusion by the chairs Patoulidou A</p>		