

ICMLA 2010 Conference Program

Hyatt Regency Bethesda, Washington D.C., USA

12-14 Dec. 2010

Registration:		Dec. 11 (5:00 pm – 8:00 pm), Dec. 12-14 (8:00 am – 5:00 pm)	
Date	Time		
Dec. 12 Sunday	8:20	Opening Remarks	
	8:30	<u>Invited Talk</u> Tom M. Mitchell, Carnegie Mellon University, USA <i>Learning to Read the Web</i>	
		Regular paper sessions (20 minutes each)	
	9:30	<u>Session A: Data acquisition, cleansing and categorization</u> Session Chair: Chen-Hsiang Yeang 197 - Improved Fine-Grained Component-Conditional Class Labeling with Active Learning David Miller, Chu-Fang Lin, George Kesidis and Christopher Collins 236 - A Novel Noise Filtering Algorithm for Imbalanced Data Jason Van Hulse, Taghi Khoshgoftaar and Amri Napolitano 253 - Dynamic Batch Size Selection for Batch Mode Active Learning in Biometrics Shayok Chakraborty, Vineeth Balasubramanian and Sethuraman Panchanathan 188- A Study of Smoothing Algorithms for Item Categorization on e-Commerce Sites Dan Shen, Jean-David Ruvini and Neel Sundaresan	<u>Session B: Planning and reinforcement learning</u> Session Chair: John Anderson 136 - From Serve-on-Demand to Serve-on-Need: A Game Theoretic Approach Yong Lin 200 - Autonomous Navigation in Dynamic Environments with Reinforcement Learning and Heuristic Elizabeth Duane Costa and Maury Gouvêa Jr. 202 - Public Goods Game Simulator with Reinforcement Learning Agents ManChon U and Zhen Li 280 - Enhancing Inference in Relational Reinforcement Learning via Truth Maintenance Systems Mandana Hamidi, Amir Fijany and Jean-Guy Fontaine

Dec. 12 Sunday	10:50	Coffee Break	
		Regular paper sessions (20 minutes each)	
	11:10	<p><u>Session C: Supervised Learning</u></p> <p>Chair: Qi Li 147 - An all-at-once Unimodal SVM Approach for Ordinal Classification Joaquim F. Pinto da Costa, Ricardo Sousa and Jaime S. Cardoso</p> <p>160 - Centroid-based Classification Enhanced with Wikipedia Abdullah Bawakid</p> <p>249 - Classification Models with Global Constraints for Ordinal Data Jaime Cardoso and Ricardo Sousa</p> <p>284 - Appearance based recognition using spatial and discriminant influence Qi Li and Chang-Tien Lu</p> <p>211- Multi-Class Classification Using a New Sigmoid Loss function for Minimum Classification Error (MCE) Madhavi Ratnagiri, Lawrence Rabiner and Biing-Hwang (Fred) Juang</p>	<p><u>Session D: Multi-party, multi-modal, multi-objective learning</u></p> <p>Chair: Dr. Huanjing Wang 141 - A multimodel approach of complex systems identification and control using neural and fuzzy clustering algorithms Nesrine ElFelly, Jean-Yves Dieulot, Pierre Borne and Mohamed Benrejeb</p> <p>145 - Learning Collaborative Behavior by Observation Cynthia Johnson and Avelino Gonzalez</p> <p>146 - Heterogeneous Imitation Learning from Demonstrators of Varying Physiology and Skill Jeff Allen and John Anderson</p> <p>149 - Multimodal Parameter-exploring Policy Gradients Frank Sehnke, Alex Graves, Christian Osendorfer and Jürgen Schmidhuber</p> <p>302- Discovering Knowledge Rules with Multi-Objective Evolutionary Computing Rafael Giusti and Gustavo Batista</p>
	12:50	Lunch Break	
	13:50	<p><u>Invited Talk</u> Ishwar K. Sethi, Oakland University, USA <i>Machine Learning for Multimedia Information Retrieval</i></p>	

Dec. 12 Sunday	Regular paper sessions (20 minutes each)	
	<p>14:50</p> <p><u>Session E: Feature Selection</u></p> <p>Session Chair: Guangzhi Qu</p> <p>268 - How dependencies affect the capability of several feature selection approaches to extract the key features Qin Yang and Robin Gras</p> <p>269 - A Comparative Study of Ensemble Feature Selection Techniques for Software Defect Prediction Huanjing Wang, Taghi Khoshgoftaar and Amri Napolitano</p> <p>190- A New Approach to Classification with the Least Number of Features Sascha Klement and Thomas Martinetz,</p> <p>288 - Comparative Analysis of DNA Microarray Data Through the Use of Feature Selection Techniques David Dittman, Taghi Khoshgoftaar, Randall Wald and Jason Van Hulse</p>	<p><u>Session F: Probabilistic and Model Based Learning</u></p> <p>Session Chair: Mihai Boicu</p> <p>165 - A probabilistic graphical model of quantum systems Chen-Hsiang Yeang</p> <p>181 - Heuristic Method for Discriminative Structure Learning of Markov Logic Networks Quang Thang, Exbrayat Matthieu and Vrain Christel</p> <p>187 - Learning Viewpoint Planning in Active Recognition on a Small Sampling Budget: a Kriging Approach Joseph Defretin, Julien Marzat and Helene Piet-Lahanier</p> <p>228 - Model-Based Co-clustering for Continuous Data Mohamed Nadif and Gérard Govaert</p>
	<p>16:10</p> <p>Coffee Break</p>	

	Regular paper sessions (20 minutes each)	
	<p>16:20</p> <p><u>Session G: Similarity Learning for Pattern Recognition</u></p> <p>Session Chair: Chunmei Liu</p> <p>195 - Similarity Learning in Nearest Neighbor and RELIEF Algorithm Ali Qamar and Eric Gaussier</p> <p>252 - An Improved Co-Similarity Measure for Document Clustering Syed Fawad Hussain, Clement Grimal and Gilles Bisson</p> <p>290 - Multilayer Ferns: A Learning-based Approach of Patch Recognition and Homography Extraction Ce Gao, Yixu Song and Peifa Jia</p> <p>281 – A Binocular Framework for Face Liveness Verification Under unconstrained Location Qi Li, Zhonghang Xia and Guangming Xing</p> <p>153 - A Chunking Method for Euclidean Distance Matrix Calculation on Large Dataset Using multi-GPU Qi Li, Vojislav Kecman and Raied Salman</p>	<p><u>Session H: Kernel Learning Methods</u></p> <p>Session Chair: Zhonghang Xia</p> <p>131 - Modeling and Training Radial Basis Functions with Integrate-and-Fire Neurons Jeremy Marvel, Richard Hudson and Wyatt Newman</p> <p>154 - Multiple Kernel Learning by Conditional Entropy Minimization Hideitsu Hino, Nima Reyhani and Noboru Murata</p> <p>166 - Kernel-based Approaches For Collaborative Filtering Zhonghang Xia, Wenke Zhang, Manghui Tu and I-Ling Yen</p> <p>248 - Kernel Learning for Efficiency Maximization in the Conformal Predictions Framework Vineeth Balasubramanian, Shayok Chakraborty, Sethuraman Panchanathan and Jieping Ye</p> <p>348 - Validating Meronymy Hypotheses with Support Vector Machines and Graph Kernels Tim vor der Bruck and Hermann Helbig</p>

**Dec. 12
Sunday**

**Dec. 12
Sunday**

18:00
to
19:30

Poster Session:

Posters from main track:

- 134 - Bayesian Inferences And Forecasting in Spatial Time Series Models; Sungduck Lee
- 151 - Consensus Feature Ranking in Datasets with Missing Values; Shobeir Fakhraei, Hamid Soltanian-Zadeh, Kost Elisevich, Farshad Fotouhi
- 156 - Hybridization of Base Classifiers of Random Subsample Ensembles for Enhanced Performance in High Dimensional Feature Spaces; Santhosh Pathical, Gursel Serpen
- 158 - Patient-Specific Seizure Detection From Intra-cranial EEG Using High Dimensional Clustering; Haimonti Dutta
- 159 - Aggregating Multiple Biological Measurements per Patient; Valentina Zubek, Faisal Khan
- 161 - Empowering Simultaneous Feature and Instance Selection in Classification Problems through the Adaptation of Two Selection Algorithms; Rafael Carmo, Fabricio Freitas, Jerffeson Souza
- 163 - Feature Transformation and Model Design Using Minimum Classification Error; Madhavi Ratnagiri, Lawrence Rabiner, Biing-Hwang (Fred) Juang
- 164 - On the Scalability of Supervised Learners in Metagenomics; ManChon U, Vasim Mahamuda, Khaled Rasheed
- 169 - On Estimation Of Quantiles For Pairwise Distances; Sai Venu Gopal Lolla, Lawrence Hoberock
- 170 - Overcoming Alpha-Beta Limitations Using Evolved Artificial Neural Networks; Yarin Gal, Mireille Avigal
- 178 - A Comparison of Techniques for Handling Incomplete Input Data with a Focus on Attribute Relevance Influence; Mónica Millán-Giraldo, J. Salvador Sánchez, V. Javier Traver
- 179 - Effective Virtual Machine Monitor Intrusion Detection Using Feature Selection on Highly Imbalanced Data; Malak Alshawabkeh, David Kaeli
- 182 - Pre-Processing Structured Data for Standard Machine Learning Algorithms by Supervised Graph Propositionalization - a Case Study with Medicinal Chemistry Datasets; Thashmee Karunaratne, Henrik Boström, Ulf Norinder
- 183 - Novel Approach for Test Methods Automatic Selection in Product Reliability; Nobuyuki Ohmori, Tatsunori Mori
- 191 - System Identification with Multi-Agent-based Evolutionary Computation Using a Local Optimization Kernel; Sebastian Bohlmann, Volkhard Klinger, Helena Szczerbicka
- 198 - Power Iteration Denoising, Panganai Gomo and Mike Spann
- 199 - Combining Rule Induction and Reinforcement Learning: Agent-based Vehicle Routing; Bartłomiej Sniezynski, ; Wojciech Wojcik, Jan Gehrke, Janusz Wojtusiak
- 205 - Domain Adaptation in Sentiment Classification; Diego Uribe

**Dec. 12
Sunday**

- 207 - The Influence Machine: Nonnegative Instance-Space Learning with Differentiated Regularization; Jian Zhang
- 210 - Nonlinear Dynamical Multi-Scale Model of Associative Memory; Alexander Duda, Stephen Levinson
- 220 - Map-TreeMaps : A new approach for hierarchical and topological clustering; Hanene Azzag, Mustapha Lebbah, Aymen Arfaoui
- 222 - A Comparison of Linear Support Vector Machine Algorithms on Large Non-Sparse Datasets; Alina Lazar
- 223 - Deep Spatio-temporal Feature Learning with Application to Image Classification; Thomas Karnowski, Itamar Arel, Derek Rose
- 227 - Learning gene regulatory networks with predefined attractors for sequential updating schemes using simulated annealing; Gonzalo Ruz, Eric Goles
- 231 - Neuro-Fuzzy Function Approximations using Feedforward Networks - An Application of Sigmoidal Signal; V Suresh Kumar, Vivekananda Pandian
- 233 - Boolean Factor Analysis as a Preprocessing Step in Machine Learning; Jan Outrata
- 245 - Classification of Live Moths Combining Texture, Color and Shape Primitives; Gustavo Batista, Bilson Campana, Eamonn Keogh
- 264 - Unsupervised and Online Update of Boosted Temporal Models: the UAL2Boost; Pedro Ribeiro, Plinio Moreno, Jose Santos-Victor
- 265 - Discovering and Characterizing Hidden Variables in Streaming Multivariate Time Series; Soumi Ray, Tim Oates
- 285 - Predicting End-to-end Network Load and Phase Transition for Congestion Avoidance; Akshay Vashist, Siun-Chuon Mau, Alexander Poylisher, Ritu Chadha
- 286 - Pre-image Problem in Manifold Learning and Dimensional Reduction Methods; Omar Arif, Patricio Vela, Wayne Daley
- 291 - Spatial Based Feature Generation for Machine Learning Based Optimization Compilation; Abid Malik
- 293 - Variable selection: A statistical dependence perspective; Sohan Seth, Jose Principe
- 296 - An Optimal Regression Algorithm for Piecewise Functions Expressed as Object-Oriented Programs; Juan Luo George
- 298 - Robust Learning for Adaptive Programs by Leveraging Program Structure; Jervis Pinto, Alan Fern, Tim Bauer, Martin Erwig
- 303 - A Relative Tendency Based Stock Market Prediction System; ManChon U, Khaled Rasheed
- 307 - Constrained Nonnegative Tensor Factorization for Clustering; Wei Peng
- 308 - Automatic Synonym and Phrase Replacement Show Promise for Style Transformation; Foaad Khosmood, Robert Levinson

<p>Dec. 12 Sunday</p>		<p>Posters from special sessions:</p> <p>331 - Query expansion for UMLS Metathesaurus disambiguation based on automatic corpus extraction; Antonio Jimeno Yepes and Alan Aronson</p> <p>335 - A Bayesian Nonparametric Model for Joint Relation Integration and Domain Clustering; Dazhuo Li, Fahim Mohammad and Eric Rouchka</p> <p>376 - Discovering and Counting Biomedical Verbs; Sonjia Waxmonsky, John Goldsmith and Andrey Rzhetsky</p> <p>340 - The Design and Application of the Public Booking Service System; Liu Dan and Yue Kai Duan</p> <p>300 - Peptide Sequence Tag-Based Blind Identification-based SVM model; Hui Li, Chunmei Liu, Xumin Liu, Macire Diakite, Legand Burge, Abdul-Aziz Yakubu and William Southerland</p> <p>365 - A Framework for Comprehensive Electronic QA in Radiation Therapy; J. Kildea, M. Evans and W. Parker</p> <p>345 - Applying permutation tests for assessing the statistical significance of wrapper based feature selection; Antti Airola, Tapio Pahikkala, Jorma Boberg and Tapio Salakoski</p> <p>375 - A novel textual representation scheme for identifying clinical relationships in patients records; Rezarta Islamaj Dogan, Aurelie Neveol and Zhiyong Lu</p> <p>ICMLA Challenge posters:</p> <p>342 - Unsupervised Speaker Clustering in a Linear Discriminant Subspace; Theodoris Giannakopoulos and Sergios Petridis</p> <p>343 - Speaker Clustering using Trails in Feature Space; Ondřej Sýkora</p> <p>368 - Clustering based on Point-Distribution Algorithm; Jianfei Wu</p>
	<p>18:00- 19:50</p>	<p><u>Tutorial (in parallel with poster session):</u></p> <p>Jose A. Lozano, Guzman Santafe and Inaki Inza, University of the Basque Country, Spain</p> <p><i>Classifier performance evaluation and comparison</i></p>

December 13 2010 (Monday)

Date	Time			
Dec. 13 Monday	8:30	<u>Invited Talk</u> Gheorghe Tecuci, George Mason University, USA <i>Cognitive Agents that Learn, Tutor and Assist in Problem Solving</i>		
		Regular paper sessions (20 minutes each)		
	9:30	<u>Session I: Unsupervised Learning</u> Session Chair: M. Arif Wani 167- Improved Unsupervised Clustering Over Watershed-Based Clustering Sai Venu Gopal Lolla and Lawrence Hoberock 177 - Pairwise Constrained Clustering with Group Similarity-Based Patterns Tianming Hu, Chuanren Liu, Jing Sun, Sam Yuan Sung, and Peter A. Ng, 240- Parallel Projections for Manifold Learning Harry Strange and Reyer Zwiggelaar	<u>Session J: Machine Learning in Bioinformatics and Computational Biology (I)</u> Session Chair: Sorin Draghici 162 - Identification of Transcriptional Regulatory Networks by Learning the Marginal Function of Outlier Sum Statistic Jinghua Gu, Jianhua Xuan, Yue Wang, Rebecca Riggins and Robert Clark 287 - Computational Analysis of Muscular Dystrophy Sub-types Using A Novel Integrative Scheme Chen Wang, Sook Ha, Yue Wang, Jianhua Xuan and Eric Hoffman 283 - A Classification Approach for Risk Prognosis of Patients on Mechanical Ventricular Assistance Yajuan Wang, Carolyn Rosé, Antonio Ferreira, Dennis McNamara and James Antaki	<u>Section K: Bayesian Learning</u> Session Chair: Chen-Hsiang Yeang 173 - Learning Bayesian Networks for Improved Instruction Cache Analysis Mark Bartlett, Iain Bate and James Cussens 237 - Bayesian Classification of Flight Calls with a Novel Dynamic Time Warping Kernel Theodoros Damoulas, Samuel Henry, Andrew Farnsworth, Michael Lanzone and Carla Gomes 289 - Evolutionary Algorithm using Random Multi-point Crossover Operator for Learning Bayesian Network Structures Edimilson Santos, Estevam Hruschka and Nelson Ebecken

		247 - Learning from Multiple Related Data Streams with Asynchronous flowing Speeds Zhi Qiao, Peng Zhang, Jinghua Yan and Li Guo	266 - Neuropathic Pain Scale based Clustering for Subgroup Analysis in Pain Medicine Guangzhi Qu, Craig T. Hartrick, Hui Wu and Ishwar Sethi	152 - Semi-Supervised Anomaly Detection for EEG Waveforms Using Deep Belief Nets Drausin Wulsin, Justin Blanco, Ram Mani, and Brian Litt
Dec. 13 Monday	10:50	Coffee Break		
		Regular paper sessions (20 minutes each)		
	11:10	<u>Session L: Machine Learning and Parallel Computing</u> Session Chair: W. John Wilbur 150 - Parallel Training of a Neural Network using CUDA Victor Uc-Cetina, Xavier Sierra-Canto, and Francisco Madera-Ramirez 168 - Support Vector Machines on GPU with Sparse Matrix Format Tsung-Kai Lin and Shao-Yi Chien 267 - Space Partitioning for Scalable K-Means David Pettinger and Giuseppe Di Fatta 255- Speeding up Greedy Forward Selection for Regularized Least-Squares Tapio Pahikkala, Antti Airola and Tapio Salakoski	<u>Session M: Applications I</u> Session Chair: Seref Sagiroglu 132 - Clustering High-frequency Stock Data for Trading Volatility Analysis Xiao wei Ai, Tianming Hu, Xi Li and Hui Xiong 157 - Plant Species Classification using a 3D LIDAR Sensor and Machine Learning Ulrich Weiss, Stefan Laible, Karsten Bohlmann, Peter Biber and Andreas Zell 294 - Detecting Quasars in Large-Scale Astronomical Surveys Fabian Gieseke, Kai Lars Polsterer, Andreas Thom, Peter Zinn, Dominik Bomans, Ralf-Jürgen Dettmar, Oliver Kramer and Jan Vahrenhold	<u>Special Session N: Machine Learning in Bioinformatics and Computational Biology (II)</u> Session Chair: Sorin Draghici 209 - A parallel algorithm for predicting the secondary structure of polycistronic microRNAs Dianwei Han, Guiliang Tang, Jun Zhang 299 - A Heuristic Algorithm for Finding the Longest Pathways in a Biochemical Network Chunmei Liu, Hui Li, Alison Leonce, Legand Burge, John Trimble, Peter Keiller, and Abdul-Aziz Yakubu 319 - Using Randomised Vectors in Transcription Factor Binding Site Predictions Faisal Rezwan, Yi Sun, Neil Davey, Alistair G Rust, Rod Adams, Mark Robinson 355 - Non-Alignment Features Based Enzyme/Non-Enzyme Classification Using an Ensemble Method Nicholas J. Davidson and Xueyi Wang

	12:30	Lunch Break		
		Regular paper sessions (20 minutes each)		
Dec. 13 Monday	13:30	<p><u>Session O: Ensemble Learning</u></p> <p>Session Chair: Khaled Rasheed</p> <p>186 - Boosted Dynamic Cognitive Activity Recognition from Brain Images Jun Li and Dacheng Tao</p> <p>262 - Boosting Multi-Task Weak Learners with Applications to Textual and Social Data Jean Baptiste, Boris Chidlovskii and Remi Gilleron</p> <p>306 - The Upper and Lower Bounds of the Prediction Accuracies of Ensemble Methods Xueyi Wang and Nicholas Davidson</p> <p>241- Evolutionary Selection of Regressional Predictors to Enhance the Performance of Microfossil-based Paleotemperature Proxies, L. Gwenn Volkert, Amin Assareh and Joseph Ortiz</p>	<p><u>Session P: Reinforcement learning</u></p> <p>Session Chair: Taghi Khoshgoftaar</p> <p>148 - Decentralized and Partially Decentralized Reinforcement Learning for Distributed Combinatorial Optimization Problems Omkar Tilak and Snehasis Mukhopadhyay</p> <p>230- Multi-Agent Inverse Reinforcement Learning Sriram Natarajan, Gautam Kunapuli, Kshitij Judah, Prasad Tadepalli, Kristian Kersting, and Jude Shavlik</p> <p>274 - Ensembles of Neural Networks for Robust Reinforcement Learning Alexander Hans and Steffen Udluft</p> <p>314 - MMM-PHC: A Particle-Based Multi-Agent Learning Algorithm Philip Cook and Michael Goodrich</p>	<p><u>Special Session Q: Machine Learning in Bioinformatics and Computational Biology (III)</u></p> <p>Session Chair: Sorin Draghici</p> <p>320 - Automatic Detection of HIV Drug Resistance-Associated Mutations Betty Cheng, Jaime Carbonell</p> <p>347 - Selection of Classifier and Feature Selection Method for Microarray Data Boseon Byeon, Khaled Rasheed</p> <p>370 - Smoothing Gene Expression Using Biological Networks Yue Fan, Mark Kon, Shinuk Kim, Charles DeLisi</p>

		Regular paper sessions (20 minutes each)		
Dec. 13 Monday	14:50	<p><u>Special Session R: Machine Learning Methods for Biomedical Literature Analysis and Text Retrieval</u></p> <p>Session Chairs: Lana Yeganova/Rezarta Islamaj Dogan</p> <p>329 - Building a Biomedical Tokenizer Using the Token Lattice Design Pattern and the Adapted Viterbi Algorithm Neil Barrett and Jens Weber-Jahnke</p> <p>353 - A structural SVM Approach for Reference Parsing Xiaoli Zhang, Jie Zou, Daniel X. Le and George R. Thoma</p> <p>361 - A System for De-identifying Medical Message Board Text Adrian Benton, Shawndra Hill, Lyle Ungar, Annie Chung, Charles Leonard, Cristin Freeman and John H. Holmes</p> <p>371 - Improving a Gold Standard: Treating Human Relevance Judgments of MEDLINE Document Pairs Won Kim and W John Wilbur</p> <p>372 - Identifying Abbreviation Definitions - Machine Learning with Naturally Labeled Data Lana Yeganova, Donald Comeau and W. John Wilbur</p>	<p><u>Session S: Online and Incremental Learning</u></p> <p>Session Chair: Taghi Khoshgoftaar</p> <p>139 - Incremental kNN classifier exploiting correct - error teacher for activity recognition Kilian Förster, Samuel Monteleone, Alberto Calatroni, Daniel Roggen and Gerhard Tröster</p> <p>174 - Incremental learning of relational action rules Christophe Rodrigues, pierre Gerard, celine Rouveirol and Henry Soldano</p> <p>206 - On-Line Adaptation of Exploration in the One-Armed Bandit with Covariates Problem Adam Sykulski, Niall Adams and Nicholas Jennings</p> <p>244- On-line, Incremental Learning for Real-Time Vision Based Movement Recognition Anuraag Sridhar, Arcot Sowmya and Paul Compton</p>	<p><u>Special session T: Dynamic Learning in Non-Stationary Environments</u></p> <p>Session Chair: Moamar Sayed-Mouchaweh</p> <p>225 - Learning in dynamic environments: Application to the identification of hybrid dynamic systems Moamar Sayed-Mouchaweh</p> <p>242 - Incremental Nystrom Low-Rank Decomposition for Dynamic Learning Lin Zhang and Hongyu Li</p> <p>328 - Dynamic Decision Method Based on Contextual Selection of Representation Subspaces Pierre Beausery, Andre Smolarz, Xiyang He and Yuan Dong</p> <p>337 - On Dynamic Selection of the Most Informative Samples in Classification Problems Edwin Lughofer</p> <p>341 - A hybrid multi-classifier to characterize and interpret hemiparetic patients gait coordination Laurent Hartert and Moamar Sayed-Mouchaweh</p> <p>366 - Improving Premise Structure in Evolving Takagi-Sugeno Neuro-Fuzzy Classifiers Abdullah Almaksour and Eric Anquetil</p>

	16:10	Coffee Break	
Dec. 13 Monday	16:30	<u>Tutorials (in parallel):</u> Asim Roy, Arizona State University, USA <i>Autonomous Machine Learning</i> Hakan Erdogan, Sabanci University, Turkey <i>Sequence Labelling: Generative and Discriminative Approaches</i>	
	19:30	Banquet Award Presentation (best papers, best posters, ICMLA competition award)	

December 14 2010 (Tuesday)

Date	Time		
	8:30	<u>Invited Talk</u> Zoubin Gahramani, Cambridge University, UK <i>Nonparametric Bayesian Machine Learning</i>	
		Special Sessions papers (20 minutes each)	
Dec. 14 Tuesday	9:30	<u>Special Session U: Autonomous Machine Learning</u> Session Chair: Asim Roy 215 - Learning to Be a Good Tour-Guide Robot J. Javier Rainer and Ramon Galán 257 - Self-Optimizing a Clustering-based Tag Recommender for Social Bookmarking Systems Malik Tahir Hassan, Asim Karim, Fahad Javed and Naveed Arshad 344 - Autonomous clustering characterization for categorical data Nistor Grozavu and Lazhar Labiod Youn`es Bennani	<u>Special Session V: Business Intelligent Applications and Technologies</u> Session Chair: Wei Peng 216 - Extreme Volume Detection for Managed Print Services John Handley, Marie-Luise Schneider, Victor Ciriza and Jeffrey Earl 229 - Predicting Remaining Useful Life Based on the Failure Time Data with Heavy-Tailed Behavior and User Usage Patterns Using Proportional Hazards Model Zhiguo Li and Gregory Kott 327 - Semi-Automatic WordNet Based Emotion Dictionary Construction David Bracewell 356 - Intelligent Classification System using a Pruned BayesFuzzy Rule Set Estevam Hruschka, Yin Hsien and Heloisa Camargo
		10:50	Coffee Break

**Dec. 14
Tuesday**

Special Sessions papers		
11:10	<p><u>Special Session W: Machine Learning in Energy Applications (I)</u></p> <p>Session Chair: Ilhami Colak</p> <p>224 - Energy Production and Economic Growth: A Casuality Analysis for Turkey based on Computer Omer Ozkan, Muharrem Aktas, Huseyin Serdar Kuyuk and Serkan Bayraktaroglu</p> <p>250 - Control of Doubly-Fed Induction Generator System Using PIDNNs Faa-Jeng Lin, Jonq-Chin Hwang, Kuang-Hsiung Tan, Zong-Han Lu and Yung-Ruei Chang</p> <p>254 - Modelling Turkey's Energy Consumption Based on Artificial Neural Networks Serdar Kuyuk, Omer Ozkan, Muharrem Aktas, Serkan Bayraktaroglu</p> <p>275 - Wind Speed Forecasting Based on Second Order Blind Identification and Autoregressive Model Umut Firat, Seref Naci Engin, Murat Saraclar and Aysin Baytan Ertuzun</p> <p>332 - DC Bus Voltage Regulation of a Single Phase Shunt Active Power Filter Using a Fuzzy Logic Controller Ilhami Colak, Ramazan Bayindir, Orhan Kaplan and Ferhat Tas</p>	<p><u>Special Session X: Machine Learning with Multimedia Data</u></p> <p>Session Chair: Jens Grivolla</p> <p>333 - Interestingness Detection in Sports Audio Broadcasts Sam Davies and Denise Bland</p> <p>346 - Feature Selection in Clustering with Constraints: Application to Active Exploration of Music Collections Pedro Mercado and Hanna Lukashevich</p> <p>352 - Prediction of Time-Varying Musical Mood Distributions Using Kalman Filtering Erik M. Schmidt and Youngmoo E. Kim</p> <p>357 - Multi-view Clustering of Visual Words using Canonical Correlation Analysis for Human Action Recognition Behrouz Saghafi and Deepu Rajan</p>
12:30	Lunch Break	

		Special Sessions papers	
<p>Dec. 14 Tuesday</p>	<p>13:30</p>	<p><u>Special Session Y: Machine Learning in Energy Applications (II)</u></p> <p>Session Chair: Ilhami Colak</p> <p>317 - Hardware Implementation of a Real-Time Neural Network Controller Set for Reactive Power Compensation Systems Ramazan Bayindir and Alper Gorgun</p> <p>325 - The Personal Assessment Tool: A System Providing Environmental Feedback to Users of Shared Printers Jutta Willamowski, Antonietta Grasso, Victor Ciriza and Yves Hoppenot</p> <p>330 - Determination of Vocational Fields with Machine Learning Algorithm Halil Bulbul and Ozkan Unsal</p> <p>334 - Determining Suitability of Locations for Installation of Solar Power Station Based on Probabilistic Inference Ilhami Colak, Seref Sagiroglu, Mehmet Demirtas and Hamdi Kahraman</p> <p>336 - A New Prediction Based Digital Control DC-DC Converter Fujio Kurokawa, Hidenori Maruta, Junya Sakemi, Akihiro Nakamura and Hiroyuki Osuga</p>	<p><u>Special Session Z: Machine Learning Methods in Cancer and Radiation Therapy</u></p> <p>Session Chair: Issam El Naqa</p> <p>217 - Predicting local failure in lung cancer using Bayesian networks Jung Hun Oh, Jeffrey Craft, Rawan Al-Lozi, Manushka Vaidya, Yifan Meng, Joseph O Deasy, Jeffrey D Bradley and Issam El Naqa</p> <p>326 - Using a Bayesian feature-selection algorithm to identify dose-response models based on the shape of the 3D dose-distribution: an example from a head-and-neck cancer trial Florian Buettner, Sarah L Gulliford, Steve Webb and Mike Partridge</p> <p>350 - Using an infinite von Mises-Fisher Mixture Model to Cluster Treatment Beam Directions in External Radiation Therapy Mark Bangert, Philipp Hennig and Uwe Oelfke</p> <p>351 - Automatic Segmentation of the Prostate Using a Genetic Algorithm for Prostate Cancer Treatment Planning Payel Ghosh, Melanie Mitchell, James A. Tanyi and Arthur Y. Hung</p>

		354 - Modelling Occupancy Behaviour for Energy Efficiency and Occupants Comfort Management in Intelligent Buildings Tina Yu	369 - A Novel Application of Principal Surfaces for the Propagation of Contours in 4D CT for Radiation Treatment Planning Sheng You, Esra Ataer-Cansizoglu, Deniz Erdogan, James Tanyi and Jayashree Kalpathy-Cramer
	15:20	Coffee Break	
Dec. 14, Tuesday	15:30	<u>Tutorial:</u> Moamar Sayed-Mouchaweh, University of Reims, France <i>Learning in Dynamic Environments</i>	
	17:20	Coffee Break	
	17:30	Closing Remarks	