

Provisional Programme for IDEAL2010-06-30

Tuesday 31st August 18:00 -20:00

Welcome reception in Paisley Museum

Wednesday 1st September

9:00-9:15 Welcome addresses

9:30-10:30 Plenary

10:30 Tea/Coffee

11:00 -1:00 Genetic Algorithms and reinforcement learning

11:00-1:00 Biological information processing

1:00 – 2:30 Lunch

2:30 – 3:30 Plenary

3:30 Tea/Coffee

4:00 -6:00 Clustering and Classification

4:00-6:00 Artificial neural networks

Thursday 2nd September

9:00-10:00 Plenary

10:00 Tea/Coffee

10:30 – 12:30 Time series and Fourier-related papers

10:30-12:30 Performance issues

12:30- 2:00 Lunch

2:00-3:00 Plenary

3:00 Tea/Coffee

3:30 – 5:30 Probabilistic models and text mining

3:30 – 5:30 Agent simulations

8:00 Conference dinner at Watermill Hotel

Friday 3rd September

9:00-10:00 Plenary

10:00 Tea/Coffee

10:30 -12:30 Kernels and Data Mining

12:30 -1:30 Plenary

1:30 Lunch

Detailed program

Wednesday 1st September

11:00-1:00 Genetic algorithms and Reinforcement Learning

Cost Optimization of a Localized Irrigation System Using Genetic Algorithms

Monica S. Pais, Julio C. Ferreira, Marconi B. Teixeira, Keiji Yamanaka, Gilberto A. Carrijo

An evolutionary multi-objective optimization of market structures using PBIL

Andreas Krause, Xinyang Li

Surrogate model for Continuous and Discrete Genetic Optimization Based on RBF Networks

Lukáš Bajer, Martin Holeňa

A Hybrid Evolutionary Algorithm to Quadratic Three-Dimensional Assignment Problem with Local Search for Many-Core Graphics Processors

Piotr Lipinski

Evolution Strategies for Objective Functions with Locally Correlated Variables

Piotr Lipinski

The Penalty Avoiding Rational Policy Making algorithm in Continuous Action Spaces

Kazuteru Miyazaki

11:00-1:00 Biological information processing

Gallbladder Boundary Segmentation from Ultrasound Images Using Active Contour Model

Marcin Ciecholewski

Annotation and Retrieval of Cell Images

Maria F. O'Connor, Arthur Hughes, Chaoxin Zheng, Anthony Davies, Dermot Kelleher, Khurshid Ahmad

Neural Data Analysis and Reduction Using Improved Framework of Information-Preserving EMD

Zareen Mehboob, Hujun Yin

4:00 -6:00 Clustering and Classification

Applying Clustering Techniques to Reduce Complexity in Automated Planning Domains

Luke Dicken, John Levine

Relevance of contextual information in compression-based text clustering

Ana Granados, Rafael Martínez, David Camacho, Francisco de Borja Rodriguez

A Neighborhood-Based Clustering by Means of the Triangle Inequality

Marzena Kryszkiewicz, Piotr Lasek

An Efficient Approach to Clustering Real-Estate Listings

Maciej Grzenda, Deepak Thukral

Classification by Multiple Reducts-kNN with Confidence

Naohiro Ishii, Yuichi Morioka, Hiroaki Kimura, Yongguang Bao

A Randomized Sphere Cover Classifier

Reda Younsi, Tony Bagnall

4:00-6:00 Artificial neural networks

Dimension Reduction for Regression with Bottleneck Neural Networks
Elina Parviainen

Investigating the behaviour of Radial Basis Function Networks in Regression and Classification of Geospatial Data
Andrea Guidali, Elisabetta Binaghi, Mauro Guglielmin, Marco Pascale

Simple Deterministically Constructed Recurrent Neural Networks
Ali Rodan, Peter Tino

Clustering and visualizing SOM results
Jose Alfredo Costa

Improving the Performance of the Truncated Fourier System Least Squares Power System Load Model using an Artificial Neural Network Paradigm
Gary Leppy, Ali Osareh, Shonique Miller, Hari Thakur

Thursday 2nd September

10:30 – 12:30 Time series and Fourier-related papers

Histogram Distance for Similarity Search in Large Time Series Database
Yicun Ouyang, Feng Zhang

Analysing Satellite Image Time Series by means of Pattern Mining
Francois Petitjean, Pierre Gancarski, Florent Masegla, Germain

Trajectory based Behavior Analysis for User Verification
Hsing-Kuo Pao, Hong-Yi Lin, Kuan-Ta Chen, Junaidillah Fadlil

A privacy preserving technique for Euclidean distance based mining algorithms using a Wavelet-related transform
Mohammadali Kadampur, Somayajulu D V L N

Extracting features from an electrical signal of a non-intrusive load monitoring system
Marisa B. Figueiredo, Ana de Almeida, Bernardete Ribeiro, António Martins

Directed figure codes with weak equality
Wlodzimierz Moczurad

10:30-12:30 Performance issues

Incremental update of cyclic association rules
Eya BEN AHMED

Non-Negative Matrix Factorization Implementation Using Graphic Processing Units
Noel Lopes, Bernardete Ribeiro

Large scale instance selection by means of a parallel algorithm
Nicolás García-Pedrajas, Aida Dea Haro-García, Juan Antonio Romero del Castillo

Simplified Self-Adapting Skip Lists
Jonathan Pittard, Alan Tharp

Interval Filter: a locality-aware alternative to Bloom filters for hardware membership queries
by interval classification
Ricardo Quisiant, Eladio Gutierrez, Oscar Plata, Emilio Zapata

3:30 – 5:30 Probabilistic models and text mining

Typed Linear Chain Conditional Random Fields And Their Application To Intrusion Detection
Carsten Eilers, Mirko Horstmann, Karsten Sohr, Otthein Herzog

A Generalization of Independence in Naive Bayes Model
Yu Fujimoto, Noboru Murata

Approximating the Covariance Matrix of GMMs with Low-rank Perturbations
Jonathan Purnell, Malik Magdon-Ismail

Learning Negotiation Policies Using IB3 and Bayesian Networks
Gislaine Maria Nalepa, Edson Scalabrin, Bráulio C. Ávila, Fabrício Enembreck

Sentence Generation by Frequent Parsing Patterns
Takashi Yanagisawa, Takao Miura, Isamu Shioya

Discovering Concept Mappings by Similarity Propagation among Substructures
Qi Hua Pan, Fedja Hadzic, Tharam Dillon

3:30 – 5:30 Agent simulations

Multi-Agent Architecture with support to quality of Service and Quality of Control
Jose-luis Poza-Luján, Juan-Luis Posadas-Yagüe , Jose Simó-Ten

Adaptive Particle Swarm Optimizer for Feature selection
Amir Essegir

Selection of structures with grid optimization, in multiagent data warehouse
Marcin Gorawski, Sławomir Bańkowski , Michal Gorawski

Friday 3rd September

10:30 -12:30 Kernels and Data Mining

Generalized derivative based kernelized Learning Vector Quantization
Frank-Michael Schleif, Thomas Villmann , Barbara Hammer

On the Power of Topological Kernel in Microarray-Based Detection of Cancer
Vilen Jumutc, Pawel Zayakin

Robust 1-Norm Soft Margin Smooth Support Vector Machine
Li-Jen Chien, Yuh-Jye Lee , Zhi-Peng Kao , Chih-Cheng Chang

Towards Automatic Classification of Wikipedia Content
Julian Szymanski

New Application of Graph Mining to Video Analysis
Hisashi Koga, Tomokazu Tsuji, Takanori Yokoyama , Toshinori

The M-OLAP Cube Selection Problem: A Hyper-Polymorphic Algorithm Approach
Orlando Belo, Jorge Loureiro