

Tentative Schedule for WSOM 2014
(accepted contributions)

Wednesday, 2 July

Session I SOM-Theory / Visualization

- 8:00 Registration
9:00 Opening
9:30 How Many Dissimilarity/Kernel Self Organizing Map Variants Do We Need?
F. Rossi (France) - invited talk
- 10:30 Coffee
- 10:50 Dynamic Formation of Self-Organizing Maps
J. Fix (France)
- 11:15 MS-SOM: Magnitude Sensitive Self-Organizing Maps
E. Pelayo and D. Buldain (Spain)
- 11:40 Bagged Kernel SOM
J. Mariette, J. Boelaert, M. Olteanu and N. Villa-Vialaneix (France)
- 12:05 Probability Ridges and Distortion Flows: Visualizing Multivariate Time Series Using a Variational Bayesian Manifold Learning Method
A. Tosi (Spain), I. Olier (UK) and A. Vellido (Spain)
- 12:30 Short Review of Dimensionality Reduction Methods Based on Stochastic Neighbor Embedding
D. H. Peluffo-Ordóñez, J. A. Lee and M. Verleysen (Belgium)
- 13:00 Lunch

Session II Prototype Based Classification

- 14:30 Attention Based Classification Learning in GLVQ and Asymmetric Classification Error Assessment
M. Kaden and T. Villmann (Germany)
- 14:55 Visualization and Classification of DNA Sequences Using Pareto Learning Self Organizing Maps Based on Frequency and Correlation Coefficient
H. Dozono (Japan)
- 15:20 Probabilistic Prototype Classification Using t-norms
F.-M. Schleich, T. Geweniger and T. Villmann (Germany)
- 15:45 Rejection Strategies for Learning Vector Quantization - a Comparison of Probabilistic and Deterministic Approaches
L. Fischer, D. Nebel, T. Villmann, B. Hammer and H. Wersing (Germany)

Poster spotlights (WSOM/MIWOCI)

- 16:15 Comparison of Spectrum Cluster Analysis with PCA and Spherical SOM and Related Issues Not Amenable to PCA
M. Ohkita, H. Tokutaka and K. Yoshihara (Japan)
- 16:16 Exploiting the Structures of the U-matrix
J. Lötsch and A. Ultsch (Germany)
- 16:17 Partial Mutual Information for Classification Analysis of Gene Expression Data by Learning Vector Quantization
M. Lange, D. Nebel and T. Villmann (Germany)
- 16:18 Composition of Learning Patterns Using Spherical Self-Organizing Maps in Image Analysis with Subspace Classifier
N. Matsuda, F. Tajima and H. Sato (Japan)
- 16:19 Self-Organizing Map for the Prize-Collecting Traveling Salesman Problem
J. Faigl (Czech Republic) and G. Hollinger (USA)
- 16:20 A Survey of SOM-based Active Contour Models for Image Segmentation
M. Abdelsamea, G. Gnecco (Italy) and M. Gaber (UK)
- 16:21 Biologically Plausible SOM Representation of the Orthographic Form of 50,000 French Words
C. Touzet, C. Kermorvant and H. Glotin (France)
- 16:30 Coffee and Poster Session
- 18:00 Social Event I (Castle Kriebstein)

Thursday, 3 July

Session III Classification / Non-Standard Metrics

- 9:00 Prototype-based Classifiers and their Application in the Life Sciences
M. Biehl (Netherlands)- invited talk
- 10:00 Coffee
- 10:20 Generative Versus Discriminative Prototype Based Classification
M. Riedel, D. Nebel, T. Villmann and B. Hammer (Germany)
- 10:45 Some Room for GLVQ: Semantic Labeling of Occupancy Grid Maps
S. Hellbach, M. Himstedt, F. Bahrmann, M. Riedel, T. Villmann and H.-J. Boehme (Germany)
- 11:10 Anomaly Detection Based on Confidence Intervals Using SOM with an Application to Health Monitoring
A. Bellas, C. Bouveyron, M. Cottrell and J. Lacaille (France)
- 11:35 RFSOM - Extending Self-Organizing Feature Maps with Adaptive Metrics to Combine Spatial and Textural Features for Body Pose Estimation
M. Klingner, S. Hellbach, M. Riedel, M. Kaden, T. Villmann and H.-J. Böhm (Germany)
- 12:00 Beyond Standard Metrics - On the Selection and Combination of Distance Metrics for an Improved Classification of Hyperspectral Data
U. Knauer, A. Backhaus and U. Seiffert (Germany)
- 12:30 Lunch
- 14:00 Social Event II (steamboat tour on Elbe/Dresden) and Conference Dinner

Friday, 4 July

Session IV Application

- 9:00 The Sky Is Not the Limit
Erzébet Merényi (USA)- invited talk
- 10:00 Coffee
- 10:20 Development of Target Reaching Gesture Map in the Cortex and Its Relation to the Motor Map: A Simulation Study
J. Yoo, J. Choi and Y. Choe (USA)
- 10:45 A Concurrent SOM-based Chan-Vese Model for Image Segmentation
M. Abdelsamea, G. Gnecco (Italy) and M. Gabe (UK)
- 11:10 Text Mining of Life-Philosophical Insights
T. Honkela, J. Korhonen, K. Lagus and E. Saarinen (Finland)
- 11:35 SOMbrero: an R Package for Numeric and Non-numeric Self-Organizing Maps
J. Boelaert, L. Bendhaiba, M. Olteanu and N. Villa-Vialaneix (France)
- 12:00 K-Nearest Neighbor Nonnegative Matrix Factorization for Learning a Mixture of Local SOM Models
D. Nova, P. Estevez and P. Huijse (Chile)
- 12:25 Closing
- 12:30 Lunch