The 14th International Conference on
Modeling Decisions for Artificial Intelligence
Kitakyushu, Japan, October 18-20, 2017
http://www.mdai.cat/mdai2017

Wednesday, October 18th

09:00 – 09:30 Opening
09:30 – 10:30 Plenary – Prof. Hiroshi Sakamoto
Chair: Makoto Ohki
    Stream Data Compression and Its Applications
10:30 – 11:00 Coffee
11:00 – 12:00 Session: Aggregation
Chair: Simon James
Comparison of risk averse utility functions on two-dimensional regions
    Yuji Yoshida
Symmetrization methods for aggregation functions
    Radko Mesiar, Andrea Stupnanova
Comparison among several parameter-free interval weight estimation methods from a crisp pairwise comparison matrix
    Masahiro Inuiguchi, Shigeaki Innan

12:00 – 13:00 Lunch
13:00 – 13:30 Plenary - Prof. Guillermo Navarro-Arribas
Chair: Vicenç Torra
    Provenance and privacy
13:30 – 14:30 Session: Privacy and Security
Chair: Guillermo Navarro-Arribas
Differentially Private Data Sets Based on Microaggregation and Record Perturbation
    Jordi Soria-Comas and Josep Domingo-Ferrer
A Methodology to Compare Anonymization Methods Regarding Their Risk-Utility Trade-Off
    Josep Domingo-Ferrer, Sara Ricci, Jordi Soria-Comas
Session-Based Network Intrusion Detection Using a Deep Learning Architecture
    Yang Yu, Jun Long, Zhiping Cai
14:30 – 15:00 Coffee
15:00 – 16:00 Session: Clustering I
Chair: Michael Mayo
An Adaptation of the ML-kNN algorithm to predict the number of classes in Hierarchical Multi-Label Classification
    Thissiany Beatriz Almeida, Helyane Bronoski Borges
On Fuzzy Clustering for Categorical Multivariate Data induced by Polya Mixture Models
    Yuchi Kanzawa
Comparison of Vectorial and Spherical Methods in Fuzzy Clustering-based Classifier
    Masayuki Higashi and Yuchi Kanzawa

Social Program: Cruise and Reception
16:40 Departure from Kyushu Institute of Technology by Bus
17:05 Arrival at Kokura Ferry Landing to get a boat
17:40 Departure from Kokura Ferry Landing for Night Cruise
        (note: Please do not take another boat departing at 17:30!!)
18:50 Approx. Arrival at Mojiko Pier and walk to the restaurant for dinner
19:00 – 21:00 Dinner at The MONTON TERRACE
21:00 Departure to Kokura Station by microbus

Thursday, October 19th

09:30 – 10:30 Plenary – Prof. Ehud Lehrer

Chair: Aoi Honda

   Integration of non-additive probabilities: aggregation when information is incomplete

10:30 – 11:00 Coffee

11:00 – 12:00 Session: Fuzzy Measures I / Applications I

Session A: Fuzzy Measures I

Chair: Katsushige Fujimoto

Event-based transformations of capacities
   Surajit Borkotokey, Radko Mesiar, Jun Li

Pan-integrals based on optimal measures
   Jun Li, Yao Ouyang, Minhao Yu

Orness and cardinality indices for averaging inclusion-exclusion integrals
   Aoi Honda, Simon James, Sutharshan Rajasegarar

Session B: Applications I

Chair: Jun Long

A Hybrid Model of ARIMA and ANN with Discrete Wavelet Transform for Time Series Forecasting
   Warut Pannakkong and Van-Nam Huynh

Novel hybrid model for activity recognition
   Hela Sfar, Amel Bouzeghoub, Nathan Raomly, Jérôme Boudy

Constructing Document Vectors using Kernel Density Estimates
   Michael Mayo, Sean Goltz

12:00 – 13:00 Lunch

13:00 – 14:00 Session: Applications II

Chair: Masahiro Inuiguchi

On Cell Detection System with User Interaction
    Yoshitaka Maeda, Yasunori Endo,Sho Sanami

A Fuzzy Colour Model Sensitive to the Context: Study Cases using PRAGR and Logics
    Zoe Falomir, Luis Gonzalez-Abril

Two-level Simple Recourse Programming Problems with Discrete Random Variables
    Hitoshi Yano, Ichiro Nishizaki, Kota Matsui

14:00 – 15:00 Session: Applications III

Chair: Yuchi Kanzawa

Joint Subjective Opinions
    Magdalena Ivanovska, Audun Jøsang, Jie Zhang, Shuo Chen

A relative evaluation method to check order relations using quicksort algorithm
    Taiki Nishijima, Aoi Honda, Makoto Ohki

Fuzzy meets privacy
    Vicenç Torra, Daniel Abril, Guillermo Navarro-Arribas

15:00 – 15:30 Coffee

15:30 – 16:30 Session: Clustering II / Applications IV

Session A: Clustering II

Chair: Jordi Soria-Comas

Antlion clustering: an aggregation method for vector data
    Yuki Toyosaka, Naoki Tamura, Ryoji Fukuda

Comparison of Fuzzy Co-Clustering Methods in Collaborative Filtering-based Recommender System
    Tadafumi Kondo and Yuchi Kanzawa

On Fuzzified Even-sized Clustering Based on Optimization
    Kei KITAJIMA, Yasunori ENDO, Yukihiro HAMASUNA

Session B: Applications IV

Chair: Zoe Falomir

On Kernel Switching Fuzzy c-Regression
    Yusuke Oi, Yasunori Endo

Using Swarm Optimization To Enhance Autoencoder's Images
    Maisa Daoud, Michael Mayo

Social Program: Conference Dinner

17:10 Departure from Kyushu Institute of Technology on foot

17:30 – 18:00 Viewing and group photo

18:30 – 20:30 Banquet at West Japan Industry Club

Friday, October 20th

09:00 – 10:00 Plenary – Prof. Masaaki Nagahara

Chair: Sozo Inoue

Sparsity methods for estimation and control

10:00 – 10:30 Coffee

10:30 – 11:30 Session: Fuzzy measures II and clustering III

Chair: Yuji Yoshida

On Edge Penalty Based Hard and Fuzzy c-Medoids for Uncertain Networks
Yukihiro HAMASUNA, Yasunori ENDO

L_1-space for Sugeno integral
Aoi Honda, Yoshiaki Okazaki

Distances and entropies
Vicenç Torra, Yasuo Narukawa

11:30 – 12:00 Plenary – Prof. Michio Sugeno

Chair: Yasuo Narukawa

A Step toward Nonlinear Statistics

12:00 Closing

12:15 – 13:00 Lunch

Social Program: Excursion

13:30 Departure from Kyushu Institute of Technology by bus

13:50 – 15:15 Kokura Castle

15:30 – 16:50 TOTO Museum

17:10 Arrival at Kokura station