Detailed Program

Monday, August 18, 2014

Welcome and Opening Ceremony
Monday   8:15 - 09:00h   Auditorium: Sérgio Bernardes
Ronei Marcos de Moraes (Organizing Chair of FLINS/ISKE 2014 and Program Chair of FLINS 2014)
Liliane dos Santos Machado (Organizing Co-Chair of FLINS/ISKE 2014)
Margareth de Fátima Formiga Melo Diniz (Rector of Federal University of Paraíba)
Jie Lu (Program Chair of FLINS 2014 and General Chair of ISKE 2014)
Etienne Kerre (Chair of FLINS/ISKE Steering Committee)
Tianrui Li (Program Chair of ISKE 2014)

Keynote Speech I
by Prof. Didier Dubois
The Contribution of Fuzzy Sets in Decision Sciences
Chair: Etienne Kerre
Monday   09:00 - 10:00h   Auditorium: Sérgio Bernardes

Regular Session: Applied Research - 1
Chair: *Anderson Meneses*
Monday   10:30 - 12:00h   Room: Manaíra

Software Architectural Style for Decision Support Systems
          Zakarya Alzamil
A Weight Determination Method of Subjective Score in Group Decision
          Tiefeng Zhang, Xin Lv and Jianwei Gu
Infography Usage in a Systematic Mapping about Online Social Networks Analysis
          Jarbele Cássia da Silva Bele, Ayslânya Wanderley, Giovanna Abreu, Ed Porto Bezerra, Alisson Brito Vasconcelos Brito and Alexandre Nóbrega
Nash-Particle Swarm Optimization Applied to the Analysis of Timber Markets in the Amazon Forest
          Anderson Meneses and Marcos Ximenes Ponte
Synthetic Aperture Radar Edge Detection with Canny's Procedure and a Gravitational Approach
          Gilberto Silva Junior, Alejandro Frery and Sandra Sandri

Special Session: Intelligent Systems and Knowledge Engineering - 1
Chair: Tianrui Li
Monday   10:30 – 12:00h   Room: Cabo Branco I

Correlation Analysis of Performance Metrics for Classifier
          Yangming Zhou and Yangguang Liu
Artificial Development and Evolution of Artificial Neural Networks Using Parametric L-Systems with Memory
          Lidio Mauro Lima de Campos and Roberto Célio Limão de Oliveira
A Framework for Overlapping Clustering
          Qi Zhang, Yan Yang, Hongjun Wang and Fei Teng
Text Co-Clustering Using Matrix Block and Correlation Coefficient
          Chaoyang Chun and Yan Yang
A novel technique for ASP.NET dynamic web validation
          Chee Sheen Chan and Jer Lang Hong

Regular Session: Insight into Fuzziness

Chair: Irina Perfilieva

Monday 10:30 – 12:00h Room: Cabo Branco II

Time Series Grouping and Trend Forecast Using F^1-Transform and Fuzzy Natural Logic
Irina Perfilieva, Vilem Novak, Anton Romanov and Nadezhda Yarushkina

Inverse limits in fuzzy dynamical systems induced by interval maps
Jiri Kupka and Jan Boronski

Extension of N-dimensional Lattice-valued Negations
Eduardo Palmeira and Benjamin Bedregal

F2-transform-Based Solution of the Cauchy Problem
Irina Perfilieva, Radek Valasek and Viktor Pavliska

Some experimental results in classification using hybrid fuzzy morphological/linear perceptrons
Peter Sussner and Felipe R. Bueno

Special Session: Soft Computing Applications - 1

Chair: Ramón Soto de la Cruz

Monday 10:30 – 12:00h Room: Jacumã

Particle Swarms Applied to the Quadratic Assignment Problem for Solving the In-Core Fuel Management Optimization
Anderson Meneses

MQDM: An Iterative Fuzzy Method for Group Decision Making
Ramón Soto, M. Elena Robles-Baldenegro, Victoria Lopez and Juan A. Camalich

FLINTSTONES: A Suite for Linguistic Decision Making
Francisco Javier Estrella Liébana, Macarena Espinilla and Luis Martinez

Fuzzy Relational Equations and the Covering Problem
Xiong Qingquan, Shu Qianyu and Wang Xueping

The Influence on Clustering Results of Electricity Load Curves Using Different Clustering Algorithms with Different Data Normalization Methods
Tiefeng Zhang, Mingdi Gu, Fei Lv and Rong Gu

Regular Session: Foundations of Computational Intelligence

Chair: Vilem Novak

Monday 14:00 – 15:30h Room: Manaíra

Bases in L-semilinear spaces
Qianyu Shu, Qingquan Xiong and Xueping Wang

The Strongly Prime Radical of a Fuzzy Ideal
Flaulles Bergamaschi and Regivan Santiago

On Monotonic Inclusion Interval Uninorms
Fagner Santana, Regivan Santiago and Fabiana Santana

Searching for a Consensus Similarity Function for Generalized Trapezoidal Fuzzy Numbers
Eloy Vicente Cestero, Alfonso Mateos Caballero and Antonio Jiménez Martín

Grafical Illustrations of Real-Valued Boolean Consistent Logical Relations
Dragan Radojevic

Regular Session: Data Analysis and Statistics

Chair: Marcelo Rodrigo Portela Ferreira

Monday 14:00 – 15:30h Room: Cabo Branco I

Bootstrapping DEA Scores for Traffic Fatality Risk Assessment in Brazil
Jorge Tiago Bastos, Yongjun Shen, Elke Hermans, Tom Brijs, Geert Wets and Antonio Clóvis Pinto Ferraz

Forecasting High Frequency Data: An Arima-Soft RBF Network Model for Time Series
Dusan Marcek

On Interval Fuzzy Bayesian Games: Preliminary Results
Tiago C. Asmus, Benjamin Bedregal and Graçaliz Dimuro

A New Architecture for a Spatio-Temporal Decision Support System for Epidemiological Purposes
Ronei Marcos de Moraes, Jordana Nogueira and Ana Sousa

New Parameters Estimators Using EM-like algorithm for Naive Bayes Classifier based on Beta Distributions
Ronei Marcos de Moraes, Alexandre Simas, Liliane Machado and Andrea Rocha

Special Session: Decision Making Using Hesitant Fuzzy Sets and Type-1 & Type-2 Fuzzy Sets - 1
Chair: Cengiz Kahraman
Monday   14:00 – 15:30h   Room: Cabo Branco II

Early Collection System Design Using Fuzzy Rule Based Inference
Sezi Çevik Onar, Başar Öztayşi and Cengiz Kahraman

Determining and Prioritizing Main Factors of Supplier Reliability
Behice Meltem Kayhan, Selcuk Cebi and Cengiz Kahraman

Fuzzy Laplace Distribution with VaR Applied in Investment Porfolio
Marcus Rocha, Lucelia Costa and Benjamin Bedregral

A Multicriteria Supplier Selection Model Using Hesitant Fuzzy Linguistic Term Sets
Cengiz Kahraman, Basar Oztaysi and Sezi Cevik Onar

Evaluation of Medical Devices Using Fuzzy Topsis with Type-2 Fuzzy Numbers
Ismail Burak Parlak and A. Cagri Tolga

Special Session: Logic and Formal Methods with Applications - 1
Chair: Jun Liu
Monday   14:00 – 15:30h   Room: Jacumã

α-Order Linear Minimal Resolution Method in Lattice-Valued Propositional Logic System LP(X)
Hairui Jia, Yi Liu and Yang Xu

Non-Clausal Multi-ary alpha-Generalized Resolution Principle for a Lattice-Valued Propositional Logic
Yang Xu, Jun Liu, Xingxing He and Shuwei Chen

Two Types of Prime Ideals on Residuated Lattices
Yi Liu, Xiaoyan Qin, Hairui Jia and Yang Xu

Some results on fuzzy sub positive implicative filters of non-commutative residuated lattice
Wei Wang and Yang Xu

The Algebra Structure of Linguistic Truth-Valued Intuitionistic Fuzzy Lattice
Hongliang Zheng and Li Zou

Poster Session: Poster Session - 1
Chair: Jun Liu
Monday   15:30 – 16:30h   Room: Tambaba

An Information System Security Evaluation Method of Business Operation Targeting the Service Composition
Wang Danchen, Xu Yang and Pu Wei

Feature Selection for Imbalanced Datasets Based on Improved Genetic Algorithm
Limin Du, Yang Xu and Liuqian Jin

Fuzzy conditional entropy based feature evaluation and selection
Hua Zhao and Keyun Qin

α-Group lock resolution principle based on lattice-valued propositional logic LP(X)
Hua Zhu and Yang Xu

Two Types of Prime Ideals on Residuated Lattices
Yi Liu, Xiaoyan Qin, Hairui Jia and Yang Xu

Detection of Web Server Security Problems Using Self Organizing Maps
Grzegorz Kolaczek

A fuzzy SNS community centrality analysis method and a case study on Ren Ren Net in China
Zi Lu, Qiuluan Zhang, Dianshuang Wu and Fang Gao

An Adaptive Spectrum Allocation Scheme Based on Matrix Game in Macro/Femtocell Hierarchical Networks
> *Peng Xu, Yang Xu and Zhenming Song*

α-Resolution Method for Lattice-valued Horn Generalized Clauses in Lattice-valued Propositional Logic System
> *Weitao Xu, Wenqiang Zhang, Dexian Zhang and Yang Xu*

Round Table: Bipolarity in Social Sciences and Mathematics
Chair: Javier Montero, Didier Dubois and Camilo Franco
Monday   15:30 – 16:30h   Auditorium: Sérgio Bernardes

Special Session: Aggregation functions and applications
Chair: Humberto Bustince
Monday   17:00 – 18:10h   Room: Manaíra

Interval Migrative Functions
> *Fabiana Santana, Fagner Santana, Regivan Santiago and Benjamin Bedregal*

Conjugate fuzzy S-implications obtained by the OWA-operator
> *Íbero Benitez, Renata Reiser, Adenauer Yamin and Benjamin Bedregal*

Distance Measures with Probabilities, OWA Operators and Weighted Averages
> *José M. Merigó, Ligang Zhou and Dejian Yu*

Special Session: Fuzzy logic in Boolean framework
Chair: Dragan Radojevic
Monday   17:00 – 18:10h   Room: Cabo Branco I

Fuzzification of Boolean networks
> *Vladimir Dobric*

Introduction of New Fuzzy Methods in Credit Risk Management
> *Milan Mrkalj*

Special Session: Intelligent Systems and Knowledge Engineering - 2
Chair: Jie Lu
Monday   17:00h – 18:10h   Room: Cabo Branco II

A Novel Framework for Validating Dynamic Web Applications with Multi Language Integration Across Different Platforms
> *Chee Sheen Chan and Jer Lang Hong*

Multi-Follower Tri-Level Decision Making with Uncooperative Followers
> *Jialin Han, Jie Lu, Guangquan Zhang and Shuyuan Ma*

Manufacturer's logistics outsourcing decision research based on free-rider
> *Qiang Guo and Min Jiang*

Training Strategy to Improve the Efficiency of an Intelligent Detection System
> *César Guevara, Matilde Santos Peñas and Victoria Lopez*

Steering Committee Meeting
Monday   19:00 - 20:30h   Room: Jacumã

Tuesday, August 19, 2014

Regular Session: Applied Research - 2
Chair: Laécio C. Barros
Tuesday   8:30 – 10:00h   Room: Manaíra

gMapReduce: A Self-adaption MapReduce Framework based on GrC
  Junbo Zhang, Tianrui Li, Fei Teng and Chuan Luo
User Demand-driven Patent Topic Classification Using Machine Learning Techniques
  Fujin Zhu, Xuefeng Wang, Donghua Zhu and Yuqing Liu
An Approach Via Fuzzy Sets Theory for Predator-Prey Model
  Magda S. Peixoto, Laécio C. Barros and Rodney C. Bassanezi
Ballistic Reaching Using Visuomotor Maps in a Robot Manipulator for Starting a Visually Guided Task
  Daniel Fernando Tello Gamarra
Performance Evaluation of online training assessment on Embedded System
  Elaine Soares, Liliane Machado and Ronei Marcos de Moraes

Regular Session: Artificial Neural Networks
Chair: Vahid Behbood
Tuesday   8:30 – 10:00h   Room: Cabo Branco I

RBF Neural Networks Construction-Based on Self Organizing Maps for Software Effort Estimation
  Ali Idri, Wafa Boukili and Abdelali Zakrani
Extended Approach for Evolving Neo-Fuzzy Neural with Adaptive Feature Selection
  Alisson Marques Silva, Walmir Caminhas, Andre Lemos and Fernando Gomide
A Fuzzy Domain Adaptation Method Based on Self-Constructing Fuzzy Neural Network
  Peng Hao, Guangquan Zhang, Vahid Behbood and Zheng Zheng
Logistics Performance Evaluation Using Analytical Neural Network and Cumulative Belief Degrees
  Özgür Kabak, Fusun Ulengin and Sule Onsel
Accuracy Evaluation of Evolving Fuzzy Neural Networks in Pattern Recognition Tasks Using Data from Four Different Statistical Distributions
  Jodavid Ferreira and Ronei Marcos de Moraes

Special Session: Soft Computing Applications - 2
Chair: Ramón Soto de la Cruz
Tuesday   8:30 – 10:00h   Room: Cabo Branco II

A Global Discretization Method Based on Clustering And Rough Set
  Hairui Luo
A New Concept of Fuzzy Image Segmentation
  Javier Montero, Daniel Gomez, Javier Yáñez, Edwin Zarrazola and J. Tinguaro Rodriguez
Histogram Equalization Based on The Fuzzy Local Fittingness
  Marco A. GarcÍa, Cherif Ben-Youssef and Ramón Soto
Design of Intelligent Control for HVAC System Using Fuzzy Logic
  Andreas Muñoz, Matilde Santos and Victoria López
Use of Genetic Algorithms in the Aerial Path Planning for Rotorcrafts
  Pablo García Auñón and Matilde Santos Peñas

Special Session: Decision Making Using Hesitant Fuzzy Sets and Type-1 & Type-2 Fuzzy Sets - 2
Chair: Cengiz Kahraman
Tuesday   8:30 – 10:00h   Room: Jacumã

Employing an Interval Type-2 Fuzzy Topsis Method for Knowledge Management Tool Evaluation
  Gulcin Buyukozkan, Ismail Burak Parlak and A. Cagri Tolga
Expert system for evaluation of satisfaction of employees

Bogdan Walek and Jiří Bartoš

The proposition of expert system for selection of suitable job applicants
Bogdan Walek and Jiří Bartoš

Dynamic simulation of entrepreneurial project environmental assessment
Zhiyan Xu

Approximate Reasoning Method in Linguistic Truth-Valued First-Order Logic System
Xin Liu and Li Zou

Keynote Speech II
by Prof. Witold Pedrycz

Granular Fuzzy Systems: A New Direction in Soft Computing and Human-Centric Decision-Making

Chair:	Ronei Marcos de Moraes	
Tuesday	10:30 - 11:30h	Auditorium: Sérgio Bernardes

IJCIS Journal Board Meeting

Tuesday	12:00 – 14:00h	Place: to be defined

Poster Session: Poster Session - 2

Chair:	Guangquan Zhang	
Tuesday	14:00 – 15:30h	Room: Tambaba

Quasi-Homogeneous Overlap Functions
Lucélia Costa and Benjamin Bedregal

An Adjustment Strategy of Regional Environmental Quality Assessment Based on Group Differences
Bin Luo

Genetic algorithm based instance selection for nearest neighbor rule
Hua Zhao and Keyun Qin

Intelligent Sensory Evaluation of Tobacco Leaf Based on NIRS
Ting Liu, Ning Yang and Zhongtai Li

α-Semi-Lock Semantic Resolution Method Based on Lattice-Valued Propositional Logic LP(X)
Xiaomei Zhong and Yang Xu

Learning Locally Weighted Baysian Network for AUC Ranking: An Experimental Study
Qiong Wu, Lei Yuan, Zhihua Cai, Qiong Gu and Jia Wu

Semantics of Propositional Fuzzy Modal Logic with Evaluated Syntax Based on MV-Algebras
Xiaodong Pan and Yang Xu

Using Dual-Adaptive Neuro-Fuzzy Inference System in Pilot's Risk Assessment
Kaijun Xu and Xingxing He

Alpha-Paramodulation for Lattice-Valued Logic with Equality
Xingxing He, Yang Xu and Jun Liu

Doctoral Consortium

Chair:	Irina Perfilieva and Etienne Kerre	
Tuesday	14:00 – 15:30h	Room: Jacumã

L-Fuzzy Associative Memories with an Emphasis on Interval-Valued and type-2 Fuzzy Associative Memories
Tiago Schuster and Peter Sussner

F-transform and its applications
Anand Pratap Singh

Fuzzy Morphological Perceptrons and Hybrid Fuzzy Morphological/Linear Perceptrons
Felipe R. Bueno and Peter Sussner

Keynote Speech III

by Prof. Peter Sussner
Some Approaches towards Lattice Computing in Mathematical Morphology and Computational Intelligence

Chair:	Jie Lu	
Tuesday	15:30 - 16:30h	Auditorium: Sérgio Bernardes

Special Session: Logic and Formal Methods with Applications - 2

Chair:	Jun Liu	
Tuesday	17:00 - 18:10h	Room: Manaíra

An Outline of 2n–Value Propositional Calculus with a Big Data Setting
Long Hong and Ningning Zhou
A Method of Data Clustering Based on Dynamic Learning
Xiaohong Liu
A Rule Base and its Inference Method Using Evidential Reasoning
Liuqian Jin, Yang Xu and Xin Fang
Formal Logical Transformation of Hierarchical Human Activity for Reasoning Based Recognition
Shuwei Chen, Jun Liu, Hui Wang and Juan Augusto

Special Session: Soft Computing Applications - 3

Chair:	Ramón Soto de la Cruz	
Tuesday	17:00 - 18:10h	Room: Cabo Branco I

Image Stabilization System Based on Minimization Frame Differences by a Fuzzy Logic Supervisor
David Reolid Roldán and Matilde Santos
Fuzzy Fuel Control in an Aircraft: A First Approach
Elias Plaza Alonso and Matilde Santos
Fuzzy Logic VS Analytic Controllers on Non-Linear System
Ernesto Aranda, María Guinaldo, Matilde Santos and Sebastián Dormido
From Semantic Fuzzy 2-Tuples to Linguistics: A Semantic Partition
Mohammed-Amine Abchir and Isis Truck

Regular Session: Uncertainty Modeling

Chair:	Qiang Wei	
Tuesday	17:00 - 18:30h	Room: Cabo Branco II

A search method for feasible neighborhoods of intelligent car based on neighborhood systems
Hailiang Zhao
A Hybrid DEA-Fuzzy Method for Risk Assessment in Virtual Organizations
Fernanda Sales Bittencourt de Lemos, Rafael Giordano Vieira, Omir Alves and Adriano Fiorese
An Online Design of Experiments for Optimizing Human Perception on Virtual Garments
Xiao Chen, Xianyi Zeng, Ludovic Koehl and Julie Boulenguez-Phippen
A Study on After-Temporal Association Between Online Search Volume and Stock Price with an Intelligent ATARII Method
Changyu Wang, Qiang Wei, Xunhua Guo and Guoqing Chen
Partial r-interdiction Median Models for Multi-sourcing Supply Systems
Shaohui Zhang, Zheng Zheng, Xiaoyi Zhang and Yueni Zhu

Gala Dinner

Tuesday	19:30 - 22:00h

Wednesday, August 20, 2014

Regular Session: Applied Research - 3
Chair: Xianyi Zeng
Wednesday   8:30 – 10:00h   Room: Manaíra

Opening and closing from idempotent dilations
> Nicolas Madrid and Irina Perfiljeva

Fuzzy Homomorphism in Fuzzy Lattices Preserving Ideals
> Ivan Mezzomo, Benjamin Bedregal and Regivan Santiago

A Model for Fishery Forecast Based on Cluster Analysis and Nonlinear Regression
> Hongchun Yuan, Mingxing Tan and Ying Chen

An Efficient Online Learning Approach for Support Vector Regression
> Jie Liu, Valeria Vitelli, Redouane Seraoui and Enrico Zio

Selecting Relevant Parameters of a Textile Process Using Fuzzy Sensitivity and OWA Operators
> Imed Feki, Xianyi Zeng, Ludovic Koehl and Faouzi Msahli

Special Session: Intelligent Systems and Knowledge Engineering - 3
Chair: Guangquan Zhang
Wednesday   8:30 – 10:00h   Room: Cabo Branco I

A Novel Weighting Method for Online Ensemble Learningwith the Presence of Concept Drift
> Anjin Liu, Guangquan Zhang and Jie Lu

A Modified LEARN++.NSE Algorithm For Dealing with Concept Drift
> Fan Dong, Jie Lu, Guangquan Zhang and Kan Li

Improving group recommendation with outlier data filtering
> Jorge Castro, Manuel J. Barranco and Luis Martinez

Genetic algorithm based instance selection for nearest neighbor rule
> Hua Zhao and Keyun Qin

Prioritization of Urban Transformation Projects in Istanbul Using Multiattribute Hesitant Fuzzy Lingusitic Term Sets
> Başar Öztayşi, Sezi Çevik Onar and Cengiz Kahraman

A Parallel Approach for Computing Approximations of Dominance-Based Rough Sets Approach
> Shaoyong Li, Tianrui Li and Hongmei Chen

Special Session: Soft Computing Applications - 4
Chair: Ramón Soto de la Cruz
Wednesday   8:30 – 10:00h   Room: Cabo Branco II

Analysing Spanish Daily Energy Demand by programming a graphical implementation with R
> *Jose Manuel Velasco, Beatriz Gonzalez, Guadalupe Miñana, Victoria Lopez and Raquel Caro-Carretero*

Post-processing expressive rendering effects for visual deficiency
> *Catherine Sauvaget, Milan Magdics, Ruben J. Garcia and Mateu Sbert*

Toward a Polish Intelligent Virtual Tutor: An Overview of Existing Work
> *Isis Truck, Marie Durand and Marzena Watorek*

Proposal for a Semantic Annotation of Graphical Documents
> *Isis Truck, Dominique Archambault, Laure Leger, Fabien Fenouillet, Mathieu Muratet, Cedric Moreau, Guillaume Gabriel and Annie Tromeur*

Keynote Speech IV
by Prof. Weldon A. Lodwick
Solving Linear Systems with Uncertain Coefficients: An Unified Approach
Chair: Regivan H. N. Santiago
Wednesday   10:00 - 11:00h   Auditorium: Sérgio Bernardes

Closing Ceremony

Chair: Ronei Marcos de Moraes

Wednesday   11:00 - 12:30h   Auditorium: Sérgio Bernardes

Announcement of the results of Memorial Da Ruan Award

Awards Ceremony (FLINS 2014 and CBSF 2014)

Announcement of the host of the FLINS 2016

Announcement of the host of the CBSF 2016

Presentation by the host of the FLINS 2016

Conference Tour

Wednesday   14:00 - 17:00h