

IFSA Newsletter Vol. 9, No. 3, September 2012



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EDITED BY: Shun-Feng Su
VP for publicity

IFSA newsletters are a forum to share news and ideas for all IFSA members. In this issue, the report for the conference NAFIPS 2012 is given. Besides, the coming 2013 IFSA workshop is called for participation. Please check the CFP in the following.

I. Message from Newsletter Editor

Dear IFSA Members:

As the vice president for publicity, my main job is to regularly publish IFSA newsletters. IFSA newsletter is currently published quarterly. We hope that the IFSA newsletters can become a forum to share news and ideas for all members of IFSA. We would like to establish this channel for all members of IFSA. However, it may be difficult for me to make IFSA newsletters a good newsletter if no one wants to contribute articles. I hope that you can send your contributions to me so that the activities of all IFSA members are make more visible to all members and non-members of IFSA. In fact, we have also tried to rebuild the IFSA website (<http://isdlab.ie.ntnu.edu.tw/ntust/ifsa>). Thus, all IFSA newsletters can be found in (<http://isdlab.ie.ntnu.edu.tw/ntust/ifsa/sources/newsletter.html>). Since some of those contents may be obsolete. If you want to update it, please send the updated information to me (sfsu@mail.ntust.edu.tw). Finally, I would like to encourage you to get involved in the activities of the member associations as well.

Thank you

Prof. Shun-Feng Su
IFSA Vice President

II. NAFIPS 2012 Conference Report

NAFIPS 2012 Conference Report by Vladik Kreinovich, Marek Reformat, Asli Celikyilmaz and Oscar Castillo

On August 6-8, 2012, the Annual Conference of the North American Fuzzy Information Processing Society NAFIPS'2012 was held in Berkeley, California. The conference started with the invited talk by Lotfi A. Zadeh, father of fuzzy logic, on Outline of a Restriction-Centered Theory of Reasoning and Computation in an Environment of Uncertainty and Imprecision. Overall, more than a hundred papers were presented covering all aspects of fuzzy, from theoretical developments to practical applications. Almost half of these papers were submitted to topical special sessions. In the following photo Prof. Zadeh is offering his invited talk at NAFIPS 2012.



The future of fuzzy is in young people. More than 30 students participated in this conference, with many excellent talks. Based on the reviewer's evaluations of the papers and awards committee evaluation of the presentations, the following papers received the Best Paper Awards:

General Track:

Best Student Paper Awards:

1st Place: by Tim Brys, Yann-Michaël De Hauwere, Martine De Cock, and Ann Nowé
Solving Satisfiability in Fuzzy Logics with Evolution Strategies

2nd Place: by Ayman Mansour, Hao Ying, Peter Dews, Yanqing Ji, and R. Michael Massanari
Identifying Adverse Drug Reaction Signal Pairs by a Multi-Agent Intelligent System
with Fuzzy Decision Model

Best Paper Awards:

1st Place: by Karen Villaverde and Vladik Kreinovich
Locating Local Extrema under Interval Uncertainty: Multi-D Case

1st Place: by Sepideh Sedehizadeh, Mohammad Hossein Fazel Zarandi, and I. Burhan
Turksen
A Hybrid Approach to Developing Interval Type-2 Fuzzy Logic System

3rd Place: by Jadwiga R. Ziolkowska
A Fuzzy Multi-Criteria Approach for Evaluating Biofuels Feedstocks

Special Session Track:

Best Student Paper Awards:

1st Place: by Mauricio A. Sanchez, Oscar Castillo, Juan R. Castro, and Antonio
Rodriguez-Diaz
Fuzzy Granular Gravitational Clustering Algorithm

2nd Place: by Mohammad R. Rajati and Jerry M. Mendel
Solving Zadeh's Swedes and Italians Challenge Problem

3rd Place; by Roberta Dyck, Rehan Sadiq, Manuel Rodriguez, Sabrina Simard, and Robert
Tardif
Fuzzy-based Fugacity Model for Propagating Uncertainty in Assessing Swimmer
Exposures to Disinfection by Products

Best Paper Awards:

1st Place: by Mohammad M. Korjani and Jerry M. Mendel

Fuzzy Set Qualitative Comparative Analysis (fsQCA): Challenges and Application

2nd Place: by Fernando Gaxiola, Patricia Melin, and Fevrier Valdez

Backpropagation method with type-2 Fuzzy Weight Adjustment for Neural Network Learning

3rd Place: by Itziar García-Honrado

How to introduce Fuzzy Logic in Schools and High Schools

K. S. Fu awards for the best service to NAFIPS were awarded to Fernando Gomide, Asli Celikyilmaz, and Mark Wierman.

The conference benefited from a generous donation from the Ministry of Communications and Information Technologies of the Republic of Azerbaijan, one of our main sponsors.

Many many thanks for all the participants, organizers, and sponsors.

In 2013, NAFIPS conference will be joint with the IFSA Congress in Edmonton, Alberta, on June 24-28, 2013. The NAFIPS'2014 conference will be in Denver, Colorado. See you all there!

HAFSA MEMBERS AT NAFIPS 2012

There were a large number of members from HAFSA attending the NAFIPS 2012 conference held at Berkeley, USA, August 6-8, 2012. A total of 17 participants from HAFSA were present at the conference, of which 15 were from Mexico and 2 from Colombia. This number of participants represented about 15 % of the total number of participants at the international conference. Furthermore, two papers from this group of participants received awards from the conference organizers. In particular, the paper entitled: Fuzzy Granular Gravitational Clustering Algorithm, by Mauricio Sanchez, Oscar Castillo, Juan R. Castro, Antonio Rodriguez, received the Best Student Paper Award in the Category of Special sessions. On the other hand, the paper entitled: Backpropagation method with type-2 Fuzzy Weight Adjustment for Neural Network Learning, by Fernando Gaxiola, Patricia Melin, and Fevrier Valdez, received Second place in the Best paper award in the Category of Special sessions. The following photos show two of the student members delivering their paper

presentations at the conference and the whole group attending the conference.



Daniela Sanchez delivering her talk.



Leticia Cervantes delivering her talk.



Complete group attending NAFIPS 2012

IV. Message from European Society for Fuzzy Logic and Technology (EUSFLAT)

Reports on the activities of the European Society for Fuzzy Logic and Technology (EUSFLAT) members can be found in the recently launched Mathware & Soft Computing magazine. This new EUSFLAT magazine is oriented to researchers within the soft computing community, as well as those others that may find of interest fuzzy techniques, in particular, and soft computing, in general. Apart from proper scientific papers, the EUSFLAT magazine will include overviews, surveys and works that, from a general point of view, allow scientists in different fields to understand the history, the fundamental treated questions or the challenges in specific subjects that, due to their nature, can be interesting for a wide audience. Under the guidance of Prof. H. Bustince (bustince@unavarra.es), EUSFLAT is publishing two open-access issues per year that will be available online at

<http://www.eusflat.org/msc/>

As already informed to the IFSA community, first issue of the EUSFLAT magazine contained an exciting interview of R.R. Yager to L.A. Zadeh, “A meeting between two giants of Artificial Intelligence”, together with other positional and overview articles offered by qualified researchers like D. Dubois and H. Prade with his “Possibility Theory and its Applications: Where Do we Stand”, among other papers. In the EUSFLAT Magazine you will also find some news about conferences and other activities held within EUSFLAT, particularly about EUSFLAT Working Groups. A short obituary for D. Ruan, EUSFLAT board member and appreciated colleague who unexpectedly passed away last July 31, 2012, was also included.

Second EUSFLAT magazine issue will appear by the end of this year.

Javier Montero, President of EUSFLAT

IV. Message from General Chairs of NAFIPS/IFSA World Congress 2013

Dear Colleagues,

We hope you are having enjoyable summer and a brief relief from your busy life.

As you are aware, June 24-28, 2013 will bring an IFSA Congress – a flagship conference of our Federation to Canada. This is the event that creates a vibrant forum for exchanging research ideas, presenting the recent developments in the vast area of theory and applications of fuzzy sets, and facilitating networking. The coming Congress will be hosted in Edmonton, Alberta, Canada – a capital of the West. Please visit the website <http://www.ualberta.ca/~reformat/ifsa2013/index.html> for more information.

As you might have noticed, the upcoming Congress will be a joint event of IFSA and NAFIPS. This will help bring more people, build stronger fuzzy set community, and foster more interaction. Focus sessions will be one of the highly visible features of the Congress.

Please pass on the attached Call For Papers to your colleagues and encourage them to attend. This is the most effective way to spread a message. Also we encourage you to post the CFP on the newsgroup websites that you think might be interested in the Congress.

All your comments, suggestions, initiatives are very much welcome. Let us all together make

IFSA 2013 to become a truly memorable and inspiring event. Seeing all of you in Edmonton!

Cordially,

Witold Pedrycz and Marek Reformat

Contributions for the Next Issue

If you are interested in contributing information or articles for the next issue of the IFSA newsletter, please send a word file to sfsu@mail.ntust.edu.tw. The deadline for contents appearing on the next issue is Nov. 30, 2012.



NAFIPS
North American Fuzzy
Information Processing Society

Edmonton, Canada
June 24-28, 2013

IFSA World Congress 2013 NAFIPS Annual Meeting

www.ifsa2013.org

Venue

The 15th IFSA World Congress and 32nd Annual Meeting of NAFIPS will be held together in Edmonton, Alberta, one of the most vibrant cities in Canada with a wealth of cultural and tourist attractions. It is a home to the research-intensive University of Alberta, as well as Edmonton Oilers and Wayne Gretzky. It is a gateway to Rocky Mountains and North Canada. Edmonton offers a lot of possibilities to learn more about geographical and cultural variety of western Canada.

AIMS and Scope

As a truly unique and international conference in the areas of fuzzy sets and soft computing, 2013 IFSA-NAFIPS Joint Congress will bring together scientists, engineers, students, and practitioners working in fuzzy logic and related areas to present their recent research accomplishments. The Congress offers a unique platform for the exchange of ideas, fostering interaction and building multidisciplinary research linkages.

Topics

The topics cover all aspects of fuzzy systems and their applications including, but not limited to

- fuzzy sets and fuzzy logic
- mathematical foundations of fuzzy sets and fuzzy systems
- approximate reasoning, fuzzy inference models, and soft computing
- fuzzy decision analysis, decision making, optimization, and design
- fuzzy system architectures and hardware
- fuzzy methods in data analysis, statistics and imprecise probability
- fuzzy databases and information retrieval
- fuzzy pattern recognition and image processing
- fuzzy sets in management science
- fuzzy control and robotics
- possibility theory
- fuzzy sets and logic in ontology, web, and social networks
- fuzzy preference modeling
- fuzzy sets in operations research and manufacturing
- fuzzy database mining and financial forecasting
- fuzzy neural networks
- evolutionary and hybrid systems
- intelligent agents and ambient intelligence
- learning, adaptive, and evolvable fuzzy systems

Focused Sessions

Proposals for focused sessions concentrating on fundamentals, algorithms, and innovative applications of fuzzy sets and soft computing are welcome. Submission of proposals should include a short description of the session, its relevance to the Joint Congress, and a list of potential contributors. Focused sessions will be open to all participants. Organizers of Focused Sessions will be responsible for a reviewing process.

Focused Session proposals due:	December 23, 2012
Papers due:	January 28, 2013
Notification of Acceptance:	February 20, 2013
Final Papers and Early Registration:	March 21, 2013

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Marek Reformat (reformat@ualberta.ca)



Faculty of Engineering
University of Alberta



NAFIPS
North American Fuzzy
Information Processing Society

Edmonton, Canada
June 24-28, 2013

IFSA World Congress 2013 NAFIPS Annual Meeting

www.ifsa2013.org

Best Paper Awards

Two awards will be given to authors of outstanding papers, one of them for the best student paper award. To qualify for the competition, a student must be the principal (first) author of the paper and he/she should present the paper. The awardees will be decided based on the manuscript as well as on the presentation.

Chairs

Honorary Chair	Lotti A. Zadeh (<i>University of California, Berkeley</i>)
General Co-Chairs	Witold Pedrycz (<i>University of Alberta</i>) Marek Z. Reformat (<i>University of Alberta</i>)
Advisory Co-Chairs	Kaoru Hirota (<i>Tokyo Institute of Technology</i>) Ronald R. Yager (<i>Iona College</i>)
Program Co-Chairs	Oscar Castillo (<i>Tijuana Institute of Technology</i>) Janusz Kacprzyk (<i>Polish Academy of Sciences</i>) Petr Musilek (<i>University of Alberta</i>)
Publicity Chair	Aminah Robinson Fayek (<i>University of Alberta</i>)
Industrial Liaison Chair	

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