## 2015 Federated Conference on Computer Science and Information Systems (FedCSIS)

## CONFERENCE REPORT

The 2015 edition of the Federated Conference on Computer Science and Information Systems (FedCSIS; www.fedcsis.org) was held in Łódź, Poland on September 13-16, 2015. FedCSIS 2015 was hosted by the Department of Electrotechnics, Electronics, Informatics and Automatics of the Łódź University of Technology.

FedCSIS events are grouped into **thematic areas**, characterized by various degree of integration between constituting events. Areas that are listed below without the indication of the year ('15) signify "abstract areas" with no direct paper submissions (i.e. paper submissions are available only to individual events that belong to them).

- AAIA'15 10<sup>th</sup> International Symposium Advances in Artificial Intelligence and Applications
  - AIMaVIG'15 -1<sup>st</sup> International Workshop on Artificial Intelligence in Machine Vision and Graphics
  - AIMA'15 5<sup>th</sup> International Workshop on Artificial Intelligence in Medical Applications
  - ASIR'15 5<sup>th</sup> International Workshop on Advances in Semantic Information Retrieval
  - LQMR'15 1<sup>st</sup> Workshop on Logics for Qualitative Modelling and Reasoning
  - WCO'15 8<sup>th</sup> Workshop on Computational Optimization
- CSS Computer Science & Systems
  - BCPC'15 1<sup>st</sup> International Workshop on Biological, Chemical and Physical Computations
  - CANA'15 8<sup>th</sup> Computer Aspects of Numerical Algorithms
  - IWCPS'15 2<sup>nd</sup> International Workshop on Cyber-Physical Systems
  - MMAP'15 8<sup>th</sup> International Symposium on Multimedia Applications and Processing
  - WAPL'15 5<sup>th</sup> Workshop on Advances in Programming Languages
- ECRM Education, Curricula & Research Methods
  - DS-RAIT'15 2<sup>nd</sup> Doctoral Symposium on Recent Advances in Information Technology
- iNetSApp'15 3<sup>rd</sup> International Conference on Innovative Network Systems and Applications
  - EAIS'15 2<sup>nd</sup> Workshop on Emerging Aspects in Information Security
  - SoFAST-WS'15 4<sup>th</sup> International Symposium on Frontiers in Network Applications, Network Systems and Web Services
  - WSN'15 4<sup>th</sup> International Conference on Wireless Sensor Networks

- IT4MBS Information Technology for Management, Business & Society
  - ABICT'15 6<sup>th</sup> International Workshop on Advances in Business ICT
  - AITM'15 13<sup>th</sup> Conference on Advanced Information Technologies for Management
  - ISM'15 10<sup>th</sup> Conference on Information Systems Management
  - IT4L'15 4<sup>th</sup> Workshop on Information Technologies for Logistics
  - KAM'15 21<sup>st</sup> Conference on Knowledge Acquisition and Management
- JAWS Joint Agent-oriented Workshops in Synergy
  - ABC:MI'15 10<sup>th</sup> Workshop on Agent Based Computing: from Model to Implementation
  - MAS&S'15 9<sup>th</sup> International Workshop on Multi-Agent Systems and Simulations
  - SEN-MAS'15 4<sup>th</sup> International Workshop on Smart Energy Networks & Multi-Agent Systems

During the FedCSIS 2015 conference, the following Keynote Lectures have been delivered:

- John F. Sowa, The Cognitive Cycle
- Mohammed Atiquzzaman, Extending the Internet to Space
- Rick Glick, Current Trends in Analytic Databases
- Wojtek Kozaczynski, What has gone wrong in the cloud? Monitoring cloud infrastructure and things that run in it

FedCSIS 2015 was organized by the Polish Information Processing Society, Łódź University of Technology, Wrocław University of Economics and Systems Research Institute Polish Academy of Sciences, under the auspices of Prof. Lena Kolarska-Bobińska, Minister of Science and Higher Education, Andrzej Halicki, Minister of Administration and Digitization, Prof. Michał Kleiber, President of the Polish Academy of Sciences, Hanna Zdanowska, Mayor of the City of Łódź, Witold Stępień, Marshal of the Łódź Voivodship, Prof. Stanisław Bielecki, Rector of the Łódź University of Technology.

Technical co-sponsors of the FedCSIS 2015 conference included: (1) IEEE Computer Society, (2) IEEE Region 8, (3) Computer Society Chapter, Poland, (4) Gdańsk Computer Society Chapter, Poland, (5) Polish Chapter of the IEEE Computational Intelligence Society (CIS), (6) IEEE SMC Technical Committee on Computational Collective Intelligence, (7) ACM Special Interest Group on Applied Computing, (8) Łódź ACM Chapter, (9) European Alliance for Innovation (EAI), (10) Committee of the Computer Science of the Polish Academy of Sciences, (11) Polish Operational and Systems Research Society Polish, (12) Mazovia Cluster ICT and (13) Eastern Cluster ICT Poland.

Furthermore, in addition to the general FedCSIS 2015 technical collaborators, the International Symposium on Advances in Artificial Intelligence and Applications (as well as its Workshops) was technically co-sponsored by: International Rough Set Society, International Fuzzy Systems Association, European Society for Fuzzy Logic and Technology and Polish Neural Networks Society.

Polish Ministry of Science and Higher Education, Intel, and Samsung have sponsored the conference.

Media sponsors of the 2015 FedCSIS conference were: Radio Łódź, TVP Łódź, Przegląd Techniczny, datanami, and Enterprisetech.

During the AAIA 2015, the Professor Zdzisław Pawlak prize for the best paper was awarded for the tenth time. This year the winners were: Migual Ángel Abad, Ernestina Menaslvas for the paper: Recurrent drifts: applying fuzzy logic to concept similarity function, as the Best Student Paper, and Adam Grabowski, Artur Korniłowicz, Christoph Schwarzweller for the paper: Equality in computer proof-assistants as the Best Paper. These awards were co-sponsored by the Mazovia Chapter of the Polish Information Processing Society.

Furthermore, the International Fuzzy Systems Association Awards for Young Scientist were presented to: Marcin Michalak, Marek Sikora, Łukasz Wróbel for the paper: Rule Quality Measures Settings in a Sequential Covering Rule Induction Algorithm – an Empirical Approach. This award was financially sponsored by the International Fuzzy Systems Association.

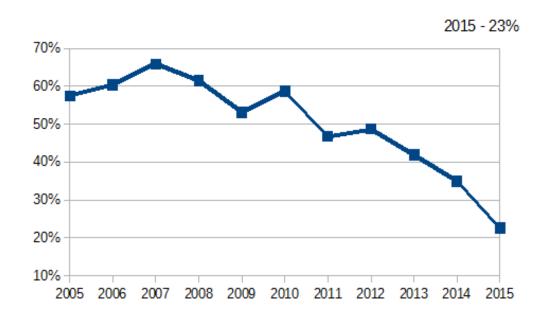
Finally, for the second time, the AAIA Data Mining Competition, focused on "Tagging Firefighter Activities at a Fire Scene" has been organized. The winner of the competition were Jan Lasek and Marek Gągolewski. Adam Zagórecki took second place, while Eftim Zdravevski was third. Awards for the winners of the contest were sponsored by the Polish Information Processing Society.

During the FedCSIS 2015, a special workshop (LQMR) was organized by the team of the "Logics for Qualitative Reasoning" project. Papers presented during this Workshop have been published as a separate volume of the Annals of Computer Science and Information Systems (ACSIS) series (ISSN 2300-5963, ISBN 978-83-60810-78-1).

English was the exclusive conference language. In 2015, the FedCSIS conference attracted 371 submissions (not counting papers submitted to the LQMR workshop and papers resulting from the data mining competition). Out of submitted contributions, after obtaining at least two reviews for each paper, 89 articles were accepted as full / regular papers (acceptance rate of 23.9%), 131 articles were accepted as short papers, and 33 as a position papers. Out of these papers, approximately 50% came from Poland and 50% from other (40) countries.

Conference materials were initially published on USB Pen Drives (as Preprints) and distributed to conference participants. After the conference, full and short papers have been submitted to the IEEE Digital Library (ISBN 978-83-60810-65–1, IEEE Catalog Number CFP1385N-ART, ISSN 2300-5963); furthermore, they will be sent to the Thomson Reuters Web of Science for indexing. Position Papers have been published as a separate volume (ISBN 978-83-60810-76-7, ISSN 2300-5963). Furthermore, Proceedings and Position Papers of the FedCSIS 2015 Conference (in their final version) have been posted at the conference WWW site – available through the Archive section (joining Proceedings from **all** past conferences). It should be stressed that **only** papers presented in the conference were published in either form (the FedCSIS conference series strictly adheres to the "IEEE No-show Policy").

The figure below represents the acceptance rate (for regular papers) of the FedCSIS conference, since 2005 when it started as a Scientific Session organized within the Autumn Meeting of the Polish Information Processing Society, through years 2006-10 when it was run under the name International Multiconference on Computer Science and Information Systems (IMCSIT), and 2011-14 when the current name and formula have been adopted.



Acceptance rate (regular paper)

Respectfully submitted by the FedCSIS Conference Series Chairs,

Maria Ganzha, Leszek Maciaszek, Marcin Paprzycki