

# IEEE IRI 2016 Agenda

## Day 1: Thursday, July 28, 2016

**7:30 – 8:30 a.m. Informal Meet & Greet - Breakfast**

Location: *Ballroom Foyer*

**8:30 – 8:45 a.m. Welcome, Conference Opening Remarks**

Location: *Symphony Ballroom*

**8:45 – 9:45 a.m. Keynote 1**

Location: *Symphony Ballroom*

### ***Life Changing Innovation***

**Rasu Shrestha**

*Chief Innovation Officer, University of Pittsburgh Medical Center (UPMC)*

*Executive Vice President of UPMC Enterprises, Pittsburgh, USA*

**9:45 – 10 a.m. Break**

Location: *Symphony Foyer*

**10 a.m. – Noon Sessions & Workshops**

### **Session A11: Security and Privacy**

Chair: **Balaji Palanisamy**

Location: *Jimmy Stewart*

- **A Novel Method for Fraudulent Medicare Claims Detection from Expected Payment Deviations**  
*Richard Bauder and Taghi Khoshgoftaar (Florida Atlantic University, FL, USA)*
- **Anomaly Detection Techniques for Database Protection Against Insider Threats (Invited Paper)**  
*Asmaa Sallam, Qian Xiao, Daren Fadolkarim and Elisa Bertino (Computer Science Dept., Purdue University, IN, USA)*
- **Improving the Utility of Anonymized Datasets through Dynamic Evaluation of Generalization Hierarchies**  
*Vanessa Ayala-Rivera (School of Computer Science, University College Dublin, Ireland), Christina Thorpe (Universite de Lyon, CNRS, INSA-Lyon, France), Thomas Cerqueus and Liam Murphy (School of Computer Science, University College Dublin, Ireland)*
- **A Risk-Benefit Driven Architecture for Personal Data Release (Invited Paper)**  
*Bikash Chandra Singh, Barbara Carminati and Elena Ferrari (Department of Theoretical and Applied Science, University of Insubria Via Mazzini 5, Varese, Italy)*

### **Session A12: Reuse and Modeling**

Chair: **Min-Yuh Day**

Location: *Symphony B*

- **Reusable Meta-Models for Crowdsourcing Driven Elastic Systems (Invited Paper)**  
*Julian Jarrett and M. Brian Blake (College of Computing and Informatics, Drexel University, Philadelphia, PA, USA)*
- **Modeling Integration and Reuse of Heterogeneous Terminologies in Faceted Browsing Systems**  
*Daniel Harris (Center for Clinical and Translational Science, University of Kentucky Lexington, KY, USA)*
- **Discover Tipping Users For Cross Network Influencing (Invited Paper)**  
*Qianyi Zhan (National Laboratory for Novel Software Technology, Nanjing University, Nanjing, China), Jiawei Zhang, Philip S. Yu, Sherry Emery, (University of Illinois at Chicago, Chicago, IL, USA) and Junyuan Xie (National Laboratory for Novel Software Technology, Nanjing University, Nanjing, China)*

### Session A13: Spatial and Mobile Systems

Chair: **Konstantinos Pelechrinis**

Location: *Symphony C*

- **A Machine Learning Approach to Improve the Accuracy of GPS-Based Map-Matching Algorithms (Invited Paper)**  
*Mahdi Hashemi and Hassan A. Karimi (Geoinformatics Laboratory, School of Information Sciences University of Pittsburgh Pittsburgh, PA, USA)*
- **An Automatic Approach for Discovering and Geocoding Locations in Domain-Specific Web Data**  
*Chris Mattmann (University of Southern California, and Jet Propulsion Laboratory, California Institute of Technology, CA, USA) and Madhav Sharan (University of Southern California, Los Angeles, CA, USA)*
- **GeoTeCS: Exploiting Geographical, Temporal, Categorical and Social aspects for Personalized POI Recommendation (Invited Paper)**  
*Ramesh Baral (Florida International University, FL, USA), Dingding Wang (Florida Atlantic University, FL, USA), Tao Li and Shu-Ching Chen (Florida International University, FL, USA)*
- **Predicting Students' Behavioral Patterns in University Networks for Efficient Bandwidth Allocation: A Hybrid Data Mining Method**  
*Elham Akhond Zadeh Noughabi, Behrouz H. Far (Department of Electrical and Computer, Engineering, University of Calgary, Calgary, Canada) and Bijan Raahemi (Knowledge Discovery and Data Mining Lab, Telfer School of Management, University of Ottawa, Ottawa, Canada)*

### IEEE International Workshop on Formal Methods Integration (FMI)

Chair: **Thourava Bouabana Tebibel**

Location: *August Wilson*

- **Modular Verification of Termination and Execution Time Bounds Using Separation Logic**  
*Jafar Hamin and Bart Jacobs (Department of Computer Science, iMinds-DistriNet, KU Leuven Leuven, Belgium)*
- **Modelling Complex Timing Requirements with Refinement**  
*Gintautas Sulskus, Michael Poppleton and Abdolbaghi Rezazadeh (University of Southampton, UK)*
- **Spekl: A Layered System for Specification Authoring, Sharing, and Usage**  
*John Singleton and Gary Leavens (Department of Computer Science, University of Central Florida Orlando, FL, USA)*
- **A Formal Language for Writing Contracts**  
*William Farmer and Qian Hu (McMaster University Hamilton, Ontario, Canada)*

Noon – 1:30 p.m.      Lunch (*Symphony A*)

1:30 – 2:30 p.m.      Keynote 2

Location: *Symphony Ballroom*

### ***The Cybersecurity Paradox: A Thought Experiment***

**Ashton Mozano**

*Chief Technology Officer at Circadence, CA*

*Professor, University of San Diego, CA*

2:30 – 2:45 p.m.      Break

Location: *Ballroom Foyer*

2:45 – 4:45 p.m.      Sessions & Workshops

### **Session A21: Classification & Processing**

Chair: **Taghi Khoshgoftaar**

Location: *Jimmy Stewart*

- **Monitoring Classification Blindspots to Detect Drifts from Unlabeled Data**  
*Tegjyot Singh Sethi, Mehmed Kantardzic and Elaheh Arabmakki*
- **Designing a Testing Framework for Transfer Learning Algorithms** by *Karl Weiss, Taghi Khoshgoftaar and Oneeb Rehman*
- **Cross-Domain Sentiment Analysis: An Empirical Investigation** by *Brian Heredia, Taghi M. Khoshgoftaar, Joseph Prusa and Michael Crawford*

### **Session A22: Learning**

Chair: **Chengcui Zhang**

Location: *Symphony B*

- **Classifying Questions into Fine-grained categories using Topic Enriching**  
*Zhao Lu, Yu-Ru Lin, Qing Zhang and Mengwei Chen (Data Mining Lab, University of Louisville, Louisville, KY, USA)*
- **Clustering Web Pages Based on Structure and Style Similarity**  
*Thamme Gowda (University of Southern California, Los Angeles, CA, USA), and Chris Mattmann (NASA Jet Propulsion Laboratory, Pasadena, CA, USA)*
- **Automatic Label Data Abstraction based on Information Entropy**  
*Fumiya Kudo, Norihiko Moriwaki, Tomoaki Akitomi, Susumu Serita and Yu Kitano (Hitachi, Ltd. Research and Development Group 1-280, Tokyo, Japan)*
- **Algorithmic Decision Support for Personalized Education (Invited Paper)**  
*Tyler Morrow, Sahra Sedigh Sarvestani, Ali Hurson (Missouri University of Science & Technology, MO, USA)*

### **Session A23: Database and Cloud Systems**

Chair: **Balaji Palanisamy**

Location: *Symphony C*

- **Employing Graph Databases as a Standardization Model towards Addressing Heterogeneity**  
*Dippy Aggarwal and Karen Davis (Electrical Engineering and Computing Systems, University of Cincinnati Cincinnati, Ohio, USA)*
- **Query-Driven Sampling for Collective Entity Resolution**  
*Christan Grant (University of Oklahoma), Daisy Zhe Wang (University of Florida) and Michael Wick (University of Massachusetts, Amherst)*
- **An Extensible Software Platform for Cloud-based Decision Support and Automation in Precision Agriculture**  
*Li Tan, Hongfei Hou and Qin Zhang (Washington State University, Richland, WA, USA)*
- **Cloud-based web services for endangered language analysis (Invited Paper)**  
*Ashik Samad, Kevin Wu, and Min Chen (Computing and Software Systems, School of STEM, University of Washington Bothell Bothell, WA, USA)*

## IEEE International Workshop on Formal Methods Integration (FMI)

Chair: **Thourava Bouabana Tebibel**

Location: *August Wilson*

- **Toward Bringing Distributed System Design upon Rigorous Footing**  
*Mohammed AlMahfoudh, Ganesh Gopalakrishnan and Ryan Stutsman (School of Computing, University of Utah, Salt Lake City, UT, USA)*
- **Support for Model Checking Z Specifications**  
*Maria Ulfah Siregar (Department of Computer Science, University of Sheffield, UK)*
- **Bhive: Towards Behaviour Driven Development supported by B Method**  
*John Carter and William Gardner (School of Computer Science, University of Guelph Guelph, ON, Canada)*

**5:30 – 8:30 p.m. Poster Session & Reception**

**Poster Session:** begins at 5:30 p.m.

Chairs: **James Joshi, Kosta Pelechris**

Location: *Symphony Ballroom/Symphony Foyer*

### List of Poster Papers

- **Ensemble Classifier for Imbalanced Streaming Data Using Partial Labeling**  
*Elaheh Arabmakki, Mehmed Kantardzic and Tegjyot Singh Sethi (Data Mining Lab, University of Louisville, KY, USA)*
- **Reuse of WiFi Information for Indoor Monitoring of the Elderly**  
*Xuan Xie, Hongze Xu, Guang Yang, (School of Electronic and Information Engineering, Beijing Jiaotong University, Beijing, China)*  
*Zhi-Hong Mao, Wenyan Jia, and Mingui Sun (Departments of Neurosurgery and Electrical & Computer Engineering, University of Pittsburgh, Pittsburgh, USA)*
- **Development of Efficient Obstacle Avoidance for a Mobile Robot using Fuzzy Petri nets**  
*Philip Baldoni, Yilin Yang and Seung-Yun Kim (Department of Electrical and Computer Engineering, The College of New Jersey, NJ, USA)*
- **Analysis of Soccer Robot Behaviors using Time Petri nets**

*Daniel Ponsini, Yilin Yang and Seung-Yun Kim (Department of Electrical and Computer Engineering, The College of New Jersey, NJ, USA)*

- **Datom continued: Towards multi-objective optimization of data management entities** by *Verena Kantere (Centre Universitaire d' Informatique, University of Geneva)*
- **Intrusion Detection using a Multiple-Detector Set Artificial Immune System** by *James Brown, Mohd Anwar and Gerry Dozier (Department of Computer Science, North Carolina A&T State University)*

**Reception:** begins at 6:30 p.m.

Location: *Symphony Ballroom/Symphony Foyer*

## Day 2: Friday, July 29, 2016

**7:30 – 8:45 a.m. Informal Meet & Greet - Breakfast**

Location: *Ballroom Foyer*

**8:45 – 9:45 a.m. Keynote 3**

Location: *Symphony Ballroom*

### ***Tracking Dynamic Networks: Data Challenges for Real World Applications***

**Kathleen Carley**

*Professor of Computer Science, Director of the Center for Computational Analysis of Social and Organizational Systems, Carnegie Mellon University, Pittsburgh, PA*

**9:45 – 10 a.m. Break**

Location: *Ballroom Foyer*

**10 a.m. – Noon Sessions & Workshops**

### **Session B11: Access Control and Trust**

Chair: **Massimiliano Albanese**

Location: *Jimmy Stewart*

- **PETRA: Personalized Trust Management Architecture**  
*Hisham Salah (Arab Academy for Science and Technology, Cairo, Egypt), and Mohamad Eltoweissy (Virginia Military Institute & Virginia Tech, Virginia, USA)*
- **Object-to-Object Relationship-Based Access Control Model for Multi-Cloud Object Storage (Invited Paper)**  
*Tahmina Ahmed, Farhan Patwa and Ravi Sandhu (Institute for Cyber Security and Department of Computer Science, University of Texas at San Antonio, Texas, USA)*
- **An in-depth Study of Peer Influence on Collective Decision Making for Multi-party Access control (Invited Paper)**  
*Alpana Tyagi, Anna Squicciarini (College of Information Sciences and Technology Pennsylvania State University, PA, USA). Sarah Rajtmajer (Math Department, Pennsylvania State University, PA, USA) and Christopher Griffin (Math Department, United States Naval Academy, MI, USA)*
- **General Methods for Access Control Policy Verifications**  
*Vincent C. Hu and D. Richard Kuhn (National Institute of Standards and Technology, MD, USA)*

### **Session B12: Infrastructure Resilience and Disaster Response**

Chair: **Sahra Sedigh Sarvestani**

Location: *Symphony B*

- **A Scalable and Automatic Validation Process for Florida Public Hurricane Loss Model (Invited Paper)**  
*Haiman Tian\*, Hsin-Yu Ha\*, Samira Pouyanfar\*, Yilin Yan†, Sheng Guan\*, Shu-Ching Chen\*, Mei Ling Shyu† and Shahid Hamid# (\*School of Computing and Information Sciences, †Department of Finance, Florida International University, Florida, USA ‡Department of Electrical and Computer Engineering, University of Miami, Florida, USA)*

- **Integrating Control and Fault-Tolerant Wireless Network Design for Small Modular Nuclear Reactors (Invited Paper)**  
*Wenchen Wang\**, *Christopher D'Angelot†*, *Daniel Mosse\** and *Daniel Colet†* (\*Computer Science Department, †Mechanical Eng. and Materials Science Department, University of Pittsburgh, PA, USA)
- **Identification of Power Line Outages based on PMU Measurements and Sparse Overcomplete Representation**  
*Long Cheng*, *Chenyu You* (Rensselaer Polytechnic Institute, NY, USA) and *Liguo Chen* (North China Power Engineering Co., Ltd, Beijing, China)
- **Selective Mapping for Real-time Video Transport over Wireless LAN**  
*Hongli Luo* (Department of Computer, Electrical and Information Technology, Indiana University-Purdue University Fort Wayne Fort Wayne, Indiana, USA)

## IEEE International Workshop on Data Integration and Mining I (DIM)

Chairs: **Zifang Huang**, **Qiusha Zhu**, **Mei-Ling Shyu**

Location: *Symphony C*

### Workshop Keynote

#### *Research and Challenges of Multimedia Big Data*

**Shu-Ching Chen**

*Eminent Scholar Chaired Professor, School of Computing and Information Sciences, Florida International University, Miami, Florida, USA*

- **Generating Headline Candidates for News Articles**  
*Naoya Okumura* and *Takao Miura* (Dept.of Advanced Sciences, HOSEI University, Tokyo, Japan)
- **Process Discovery using Classification Tree Hidden Semi-Markov Model**  
*Yihuang Kang* (Department of Information Management, National Sun Yat-sen University) and *Vladimir Zadorozhny* (School of Information Sciences, University of Pittsburgh)

## IEEE Workshop on Information Reuse and Integration in Health Informatics (IRI-HI)

Chairs: **Reda Alhaji**, **Taghi Khoshgoftaar**

Location: *August Wilson*

- **Predicting Cancer Relapse with Clinical Data: A Survey of Current Techniques** by *Aaron N. Richter* and *Taghi M. Khoshgoftaar*
- **Investigating the Variation of Ensemble Size on Bagging-Based Classifier Performance in Imbalanced Bioinformatics Datasets** by *Alireza Fazelpour*, *Taghi M. Khoshgoftaar*, *David J. Dittman*, *Amri Napolitano*

Noon – 1:30 p.m.      Lunch (*Symphony A*)

1:30 – 2:30 p.m.      Keynote 4

Location: *Symphony Ballroom*

*IoT – Can We Build Them So Our Lives Can Depend on Them?*

## Taieb Znati

Professor of Computer Science, Professor of Engineering, Chair of Computer Science, University of Pittsburgh, PA

### 2:30 – 2:45 p.m. Break

Location: *Ballroom Foyer*

### 2:45 – 4:45 p.m. Sessions & Workshops

#### Session B21: Information Processing and Reuse

Chair: **Sahra Sedigh Sarvestani**

Location: *Jimmy Stewart*

- **An approach to Ontology Integration for Ontology Reuse**  
*Enrico G. Caldarola (Institute of Industrial Technologies and Automation, University of Naples Federico II, Italy) and Antonio M. Rinaldi (IKNOS-LAB Intelligent and Knowledge Systems, University of Naples Federico II, Italy)*
- **Information Fusion Approach Using Characteristic Linear Systems in Multi-Robot Search and Rescue Task**  
*Pei-Ju Lee (Department of Information Management, National Chung Cheng University, Taiwan) and Vladimir Zadorozhny (School of Information Sciences, University of Pittsburgh, Pittsburgh, PA, USA)*
- **Bloom filter tree for fast search and synchronization of tree-structured data**  
*Mengyu Wang and Ying Zhu (University of Ontario Institute of Technology, Ontario, Canada)*
- **Designing a Better Data Representation for Deep Neural Networks and Text Classification**  
*Joseph Prusa and Taghi Khoshgoftaar (Department of Computer and Electrical Engineering and Computer Science, Florida Atlantic University, Florida)*

#### Session B22: Data Storage and Analytics

Chair: **Min-Yuh Day**

Location: *Symphony B*

- **Data Analytics using Ontologies of Management Theories: Towards Implementing “From Theory to Practice”**  
*Henry Kim (York University, Canada), Jackie Ho Nam Cheung (Kingsdale Shareholder Services, Toronto, Canada), Marek Laskowski (York University, Canada) and Iryna Gel (Canadian Tire, Toronto, Canada)*
- **A Semantically-enabled SOA Governance Repository**  
*Jan Königsberger and Bernhard Mitschang (School of Excellence advanced Manufacturing Engineering, University of Stuttgart, Germany)*
- **Statistical measurement and analysis on how the Late Life Function & Disability Instrument enhances the frailty assessment compared to the national standards used on transcatheter aortic valve patients**  
*Yunkai Liu, A. Kate MacPhedran and Yu Luo (Gannon University)*
- **Domain Knowledge Assisted Data Processing for Florida Public Hurricane Loss Model (Invited Paper)**  
*Yilin Yan (University of Miami, FL, USA), Samira Pouyanfar, Haiman Tian, Sheng Guan, Hsin-Yu Ha, Shu-Ching Chen, Mei-Ling Shyu and Shahid Hamid (Florida International University, FL, USA)*



## IEEE International Workshop on Data Integration and Mining II (DIM)

Chairs: **Zifang Huang, Qiusha Zhu, Mei-Ling Shyu**

Location: *Symphony C*

- **Rapid Prototyping of a Text Mining Application for Cryptocurrency Market Intelligence**  
*Marek Laskowski (Seneca College, Toronto, Canada) and Henry Kim (York University, Toronto, Canada)*
- **Discovering News Frames: Exploring Text, Content, and Concepts in Online News Sources to Address Water Insecurity in the Southwest Region**  
*Loretta Cheeks, Tracy Stepien (Arizona State University, Arizona, USA), and Dara Wald (Lowa State University, Iowa, USA)*
- **A Topic-Independent Hybrid Approach for Sentiment Analysis of Chinese Microblog**  
*Ping Han, Shan Li and Yunfei Jia (Civil Aviation University of China, Tianjin, China)*
- **Fast Document Indexing Using Aho-Corasick State Machine**  
*Ramanpreet Singh (Faculty of Computer Science, University of New Brunswick, Canada) and Gurpreet Singh Mohaar (University of Alberta, Edmonton, Canada)*
- **Recommender System Framework for Academic Choices - Personality Based Recommendation Engine (PBRE)**  
*Muhammad Uddin, Soumita Banerjee and Jeongkyu Lee (University of Bridgeport, USA)*

## IEEE International Workshop on Information Integration in Cyber Physical Systems (IICPS)

Chair: **Massimiliano Albanese**

Location: *August Wilson*

- **Comparison of Real-Time, Mobile Data Bus Architectures**  
*Paul Simon and Scott Graham (The Air Force Institute of Technology.)*
- **An Event Detection Framework Supported by a Smart Graphical User Interface**  
*Fabio Persia and Sven Helmer (Faculty of Computer Science, Free University of Bozen-Bolzano, Italy)*
- **Tracked Robot over a Slope Path: Dynamic Stability Control**  
*Daniela D'Auria, Gianluca Ristorto, Gallo Raimondo and Fabrizio Mazzetto (Faculty of Science and Technology, Free University of Bozen-Bolzano, Italy)*
- **Anomaly Detection in Electrical Substation Circuits via Unsupervised Machine**  
*Alfonso Valdes, Richard Macwan and Matthew Backes (University of Illinois at Urbana-Champaign)*

**5:30 – 9:30 p.m. Banquet & Awards Ceremony**

Location: Le Mont Restaurant, Mt. Washington

(Bus will arrive at 5:30 p.m. and depart by 5:45 p.m.)

## Day 3: Saturday, July 30, 2016

**7:30 – 8:30 a.m. Informal Meet & Greet – Breakfast**

Location: *Ballroom Foyer*

**8:30 – 9:45 a.m. Keynote 5**

Location: *Symphony Ballroom*

### ***IBM Watson Internet of Things Industry Offerings and Challenges***

**Sandeep Gopisetty**

*IBM Distinguished Engineer & Senior Manager, IBM Cloud and Mobile Enterprise Research, Almaden Research Center, San Jose, CA*

**9:45 – 10 a.m. Break**

Location: *Ballroom Foyer*

**10 a.m. – Noon Invited Industry/Gov Session & Workshop**

### **Invited Industry / Gov Session**

Chairs: James Joshi/Hongli Luo

Location: *Symphony Ballroom*

### ***Open data and innovation in local governments (tentative title)***

**Laura Meixell**

*Analytic and Strategy Manager, City of Pittsburgh*

### ***Distributed Network Management***

**Stefano Gridelli**

*Co-Founder & CEO, NetBeez*

### ***Sharpest Tool in the Hadoop Toolbox***

**Stephen Gregory Walkauskas**

*Software Engineer Manager, HP/Vertica*

**Bob Hansen,**

*Software Engineer, HP/Vertica*

## **IEEE International Workshop on Empirical Methods for Recognizing Inference in Text (EMRITE)**

Chairs: **Min-Yuh Day, Yoshinobu Kano, Chuan-Jie Lin**

Location: *Symphony C*

- **Learning Textual Entailment Classification from a Chinese RITE Dataset Specialized for Linguistic Phenomena**  
*Chi-Ting Liu, Shao-Heng Chen and Chuan-Jie Lin (Department of Computer Science and Engineering, National Taiwan Ocean University, Taiwan)*
- **A Study on Machine Learning for Imbalanced Datasets with Answer Validation of Question Answering** by *Min-Yuh Day and Cheng-Chia Tsai (Department of Information Management, Tamkang University, Taiwan)*

- **Principle-based Approach for Semi-automatic Construction of a Restaurant Question Answering System from Limited Datasets**  
*Ting Hao Yang (Institute of Information Systems and Applications, National Tsing Hua University & Institute of Information Science, Academia Sinica), Yu-Lun Hsieh, You-Shan Chung, Cheng-Wei Shih, Shih-Hung Liu, Yung-Chun Chang and Wen-Lian Hsu (Institute of Information Science, Academia Sinica.)*
- **Improving the Selection Error Recognition in a Chinese Grammar Error Detection System**  
*Po-Lin Chen, Shih-Hung Wu (Chaoyang University of Technology, Taichung, Taiwan), Liang-Pu Chen and Ping-Che Yang (IDEAS, Institute for Information Industry, Taiwan)*

**Noon – 1:30 p.m. Lunch (Symphony A)**

**1:30 – 2:30 p.m. Keynote 6**

Location: *Symphony Ballroom*

### ***A Data Driven Approach for the Science of Cyber Security: Challenges and Directions***

**Bhavani Thuraisingham**

*Louis A. Beecherl, Jr. Distinguished Professor, Department of Computer Science*

*Executive Director of the Cyber Security Research Institute, University of Texas, Dallas, USA*

**2:30 – 2:45 p.m. Break**

Location: *Ballroom Foyer*

**2:45 – 4:45 p.m. Sessions & Workshop**

### **Session C11: Semantics for Reuse and Integration**

Chair: **Thouraya Bouabana Tebibel**

Location: *Jimmy Stewart*

- **Reusing Software Libraries Using Semantic Graphs**  
*Awny Alnusair (Indiana University Kokomo, IN, USA), Majdi Rawashdeh (Princess Sumaya University for Technology), Mohammed F. Alhamid, M. Anwar Hossain and Ghulam Muhammad (King Saud University, Saudi Arabia)*
- **Knowledge Induction based on Randomization in Case-Based Reasoning**  
*Thouraya Bouabana-Tebibel\*, Stuart H. Rubin\*\*, Asmaa Chebba\*, Sofiane Bediar\* and Syphax Iskounen\* (\*Ecole nationale Supérieure d'Informatique, LCSi Laboratory, ALGERIA; \*\* Space and Naval Warfare Systems Center Pacific, CA, USA)*
- **Semantic Interpretation of Structured Log Files**  
*Piyush Numbalkar\*, Varish Mulwad\*\*, Nikhil Puranik\*, Anupam Joshi\* and Tim Finin\* (\*University of Maryland, MD, USA; \*\* GE Global Research Niskayuna, NY, USA)*
- **Semantic Concept Detection Using Weighted Discretization Multiple Correspondence Analysis for Disaster Information Management**  
*Samira Pouyanfar and Shu-Ching Chen (School of Computing and Information Sciences, Florida International University)*

## Session C12: Computing and Users

Chair: **James Joshi**

Location: *Symphony B*

- **A Computational Model for Dyadic Relationships (Invited Paper)**  
*Clio Adris (Department of Geography, The Pennsylvania State University, PA, U.S.A)*
- **Reusing the NP-Hard Traveling-Salesman Problem to Demonstrate that P~NP (Invited Paper)**  
*Stuart Rubin (Space and Naval Warfare Systems Center Pacific, CA), Thouraya Bouabana Tebibel, Yasmin Hoadjili and Zahira Ghalem (Ecole Nationale Supérieure d'Informatique, LCS/Laboratory, ALGERIA)*
- **Towards Extracting Coherent User Concerns and their Hierarchical Organization from User Reviews**  
*Ligaj Pradhan, Chengcui Zhang and Steven Bethard (The University of Alabama at Birmingham, Birmingham, Alabama, USA)*

## Session C13: Security and Knowledge Management

Chair: **Balaji Palanisamy**

Location: *Symphony C*

- **ARM: Authenticated Approximate Record Matching for Outsourced Databases**  
*Boxiang Dong and Wendy Wang (Stevens Institute of Technology, NJ, USA)*
- **Enhancing Multimedia Imbalanced Concept Detection Using VIMP in Random Forests**  
*Saad Sadiq, Yilin Yan, Mei-Ling Shyu, (University of Miami, FL, USA) Shu-Ching Chen (Florida International University, FL, USA), and Hemant Ishwaran (University of Miami, FL, USA)*
- **Understanding anti-forensic Techniques with Timestamp Manipulation (Invited Paper)**  
*Dae-il Jang, Hyunuk Hwang and Gail-Joon Ahn (Arizona State University, USA)*
- **A Classifier Ensemble Framework for Multimedia Big Data Classification**  
*Yilin Yan (University of Miami Coral Gables, Florida, USA), Quisha Zhu (Senzari, Inc. FL, USA), Mei-Ling Shyu (University of Miami Coral Gables, Florida, USA) and Shu-Ching Chen (Florida International University, Florida, USA)*

## IEEE International Workshop on Empirical Methods for Recognizing Inference in Text (EMRITE)

Chairs: **Min-Yuh Day, Yoshinobu Kano, Chuan-Jie Lin**

Location: *August Wilson*

- **A Real Case Analytics on Social Network of Opinion Spammers**  
*Chih-Chien Wang (National Taipei University, Taipei, Taiwan), Min-Yuh Day (Tamkang University, Taipei, Taiwan) and Yu-Ruei Lin (National Taipei University, Taipei, Taiwan)*
- **Mining of learning interaction patterns in MOOCs forums**  
*K.-C. Chu (National Taipei College of Nursing, Taiwan), C.-S. Wang (Jinwen University of Science and Technology, Taiwan) and J.-H. Kuo (National Taipei College of Nursing, Taiwan)*
- **A Comparison Between Supervised and Unsupervised Models for Identify a Large Number of Categories**  
*Patrícia Andrade, Marcelo Ladeira and Rommel Novaes Carvalho (University of Brasília, Brazil)*