Tuesday, November 3, 2015

8:00 AM 5:00 PM Registration 8:00 AM 9:00 AM Continental Breakfast

9:00 a m 10:00 a.m. Opening Announcements and Plenary Mediterranean Foyer Mediterranean Foyer Riviera/Granada

Iveta Mrázová, PhD

Associate Professor and Head of Department Theoretical Computer Science and Mathematical Logic

Charles University, Czech Republic

Title: Deep Neural Networks and Their Role in the Quest for Human-

Like Brain Power

10:00 AM 10:30 AM Morning Break 10:30 AM 12:00 PM

Mediterranean Fover **Concurrent Technical Sessions**

Cyber Physical Systems:

Cyber Security
Session Chair: Douglas A. Bodner (Georgia Institute of Technology, USA) Room: Riviera/Granada

221 - Using Discrete Event Simulation to Model Attacker Interactions with Cyber 52 - Czech Insolvency Proceedings Data: Social Network Analysis | Iveta and Physical Security Systems | Casey Perkins, George Muller (Pacific Northwest National Laboratory, USA)

227 - Cyber Security Challenges within the Connected Home Ecosystem Futures 361 - An Improved Continuous-Action Extended Classifier Systems for Function | Abdullahi Arabo (University of West England, United Kingdom) Approximation | Omid Saremi, Masoud Shariat Panahi (University of Tehran, Iran); Amin Sabzehzar (University of Nevada, Reno, USA)

261 - A Systemic Approach to Re-inforce Development and Operations Functions in Delivering an Organizational Program | Syed W. Hussaini (Tata Consultancy Services, India)

233 - Mitigating Counterfeit Part Intrusions with Enterprise Simulation | Douglas A. Bodner (Georgia Institute of Technology, USA)

Castillian

46 - Using Data Mining Algorithms for Developing a Model for Intrusion Detection System (IDS) | Solane Duque; Mohd Nizam bin Omar (University Utara Malaysia, Oman)

60 - Dynamics of the Schelling Social Segregation Model in Networks | Vasco Cortez, Sergio Rica (Universidad Adolfo Ibáñez, Chile)

Data Science & Analytics:

Social Network Data & Collective Analytics Session Chair: Iveta Mrázová

(Charles University, Czech Republic)

Room: Monte Carlo

Mrázová; Peter Zvirinský (Charles University, Czech Republic)

12:00 PM 1:30 PM Luncheon & Afternoon Plenary

Sajal K. Das, PhD

IEEE Fellow Chair of Computer Science Department

Daniel St. Clair Endowed Chair in Computer Science Missouri University of Science and Technology, USA

Title: Beyond Cyber-Physical Era: What's Next?

France); Martine Callot (Airbus Group Innovations, France)

1:30 PM 3:00 PM

Concurrent Technical Sessions

Cyber Physical Systems: Systems Modeling & Design I Session Chair: Chris Orlowski

(George Washington University, USA) Room: Riviera/Granada 267 - Towards an Adaptive Model for Collaborative Simulation: From System Design to Lessons Learned. A Use Case from Aircraft Industry | Laura Roa Castro (IRT SystemX, France); Julie Stal-Le Cardinal (Centrale-Supélec,

287 - Using a Systemic Perspective to Support Engineering Change Management | Julian Wilberg, Fatos Elezi, Udo Lindemann (Technische Universität München, Germany); Iris D. Tommelein (University of California, Berkeley, USA)

281 - How System Errors Affect Aircrew Resource Management (CRM) | Justin 416 - A Wavelet Packet and Mel-Frequency Cepstral Coefficients-Based Feature Y. Adkins; Kevin MacG. Adams (University of Maryland University College, USA); Extraction Method for Speaker Identification | Claude Turner (Norfolk State Patrick T. Hester (Old Dominion University, USA)

293 - A Framework for Implementing Systems Engineering Leading Indicators for 410 - Transformation Based Score Fusion Algorithm for Multi-Modal Biometric Technical Reviews and Audits | Chris Orlowski, Paul Blessner, Timothy Blackburn, Bill Olson (George Washington University, USA)

> Mediterranean Foyer **Concurrent Technical Sessions**

3:00 PM 3:30 PM Afternoon Break

3:30 PM 5:00 PM

Cyber Physical Systems: Systems Modeling & Design II

Session Chair: Ronald E. Giachetti (Naval Postgraduate School, USA) Room: Riviera/Granada

274 - Towards Modelling Data Infrastructures in the Asset Management Domain | 492 - An Improved eXtended Classifier System for the Real-time-input Real-time-Paul Brous, Paulien Herder, Martin Janssen (Delft University of Technology, The Netherlands)

The Netherlands)

The Netherlands (University of Nevada, Reno, USA); M. Shariat Panahi, O. Saremi (University of Tehran, Iran)

240 - Application of System Design for Operational Effectiveness for Architectural Modeling of the SoS Relationship Between Primary and Enabling Systems | Marilyn T. Gaska, Joseph S. Bobinis, Vincent Galluzzo (Lockheed

246 - An Agent Based Approach for Simulating DEMO Enterprise Models | Mamadou Seck (Old Dominion University, USA); Joseph Barjis (Institute of Engineering and Management, The Netherlands);

254 - Evaluation of the DoDAF Meta-Model's Support of Systems Engineering | Ronald E. Giachetti (Naval Postgraduate School, USA)

6:30 PM 7:00 PM Cash Bar

Mediterranean Fover

Best Paper Awards Banquet and Plenary

Robert R. Hoffman, Ph.D

Senior Research Scientist 7:00 PM 9:30 PM

Institute for Human and Machine Cognition, USA

Title: Challenges for a Theory of Complex Cognitive Work Systems

Intelligent & Adaptive Systems: Machine Learning
Session Chair: Claude Turner

(Norfolk State University, USA) Room: Monte Carlo

395 - Determination of Rule Patterns in Complex Event Processing Using Machine Learning Techniques | Nijat Mehdiyev, Julian Krumeich, Dirk Werth, Peter Loos (German Research Center for Artificial Intelligence, Germany); David Enke (Missouri University of Science and Technology, USA)

402 - A Normalization Process to Standardize Handwriting Data Collected from Multiple Resources for Recognition | Wen-Li Wang (Penn State Erie, The Behrend College, USA); Mei-Huei Tang (Gannon University, USA)

University, USA); Anthony Joseph (Pace University, USA)

User Authentication through Ensemble Classification | Firas S. Assaad, Gursel Serpen (University of Toledo, USA)

> Intelligent & Adaptive Systems: Adaptive Control

Session Chair: Nuri Yilmazer (Texas A&M University - Kingsville, USA) Room: Monte Carlo

500 - μAutonomy: Intelligent Command of Movable Objects | Abdoulaye Saadou-Yaye, Julio Aráuz (Ohio University, USA)

507 - Real-Time Optimal Scheduling of a Group of Elevators in a Multi-Story Robotic Fully-Automated Parking Structure | Jayanta K. Debnath, Gursel Serpen (University of Toledo, USA)

436 - Application of Object Detection and Tracking Techniques for Unmanned Aerial Vehicles | Shreyamsh Kamate, Nuri Yilmazer (Texas A&M University Kingsville, USA)

Castillian