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Program

Conference Registration

Tutorial 1 "Challenges of and Approaches to Hard - Soft Information Fusion"

Tutorial 2 "Designing for Situational Awareness in Virtual Environments"

Tutorial 3 "Introduction to Social Network Analysis"

Tutorial 4 "Threat Assessment with Technical Intelligence Applications"

Welcome Reception

Breakfast

Keynote: Dr. Mica Endsley, Chief Scientist, USA Air Force, "Integrating Humans and Autonomous Systems: Achieving Smooth, Simple, & Seamless"

Session S1: Decision-Making

Reexamining Information Fusion--Decision Making Inter-dependencies
James Llinas (University at Buffalo, USA)
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Accuracy and Effort of Decision Making Strategies with Incomplete Information
Marc Canellas (Georgia Institute of Technology, USA); Karen Feigh (Georgia Tech, USA); Zarrin Chua (Georgia Institute of Technology, USA)
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Influence of Meta-Information on Decision-Making: Lessons Learned From Four Case Studies
Maria Riveiro (University of Skövde, Sweden); Tove Helldin (University of Skövde, Sweden); Göran Falkman (University of Skövde, Sweden)
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Coffee Break

Session S2: User Interfaces

Decision-making in Abstract Trust Games: A User Interface Perspective
Emrah Onal (SA Technologies, USA); James Schaffer (UCSB, USA); John O'Donovan (University of California, Santa Barbara, USA); Laura Marusich (Army Research Laboratory, USA); Michael Yu (Carnegie Mellon University, USA); Cleotilde Gonzalez (Carnegie Mellon University & Dynamic Decision Making Laboratory, USA); Tobias Höllerer (University of California, Santa Barbara, USA)
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Truth, Lies, and Data: Credibility Representation in Data Analysis
James Schaffer (UCSB, USA); Tarek Abdelzaher (University of Illinois, Urbana Champaign, USA); Cleotilde Gonzalez (Carnegie Mellon University & Dynamic Decision Making Laboratory, USA); Debra Jones (SA Technologies, USA); Tobias Höllerer (University of California, Santa Barbara, USA); Jason Harman (Carnegie Mellon University, USA); John O'Donovan (University of California, Santa Barbara, USA)
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Analysis on Visual Ergonomics of Instrument Display System Through Event-related-potential
Ying Jiang (Xi'an Jiaotong University, P.R. China); Jun Hong (Xi'an Jiaotong University, P.R. China); Xiaoling Li (Xi'an Jiaotong University, P.R. China); Jue Qu (Air Force Engineering University, P.R. China)
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Lunch

Session S3: Human Perception

Visual Estimation of Human Attributes: An Empirical Study of Context-Dependent Human Observation Capabilities
Dana Kerker (University at Buffalo, USA); Michael P Jenkins (Charles River Analytics, USA); Geoff Gross (University at Buffalo, USA); Ann Bisantz (University at Buffalo, USA); Rakesh Nagi (University of Illinois at Urbana-Champaign, USA)
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The Use of Visual Cues to Determine the Intent of Cyclists in Traffic
Paul Hemeren (University of Skövde, Sweden); Mikael Johannesson (University of Skövde, Sweden); Mikael Lebram (University of Skövde, Sweden); Fredrik Eriksson (University of Skövde, Sweden); Kristoffer Ekman (University of Skövde, Sweden); Peter Veto (University of Skövde, Sweden)
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The Apparent Intelligence of a System as a Factor in Situation Awareness
Serge Thill (University of Skövde, Sweden); Paul Hemeren (University of Skövde, Sweden); Maria Nilsson (Viktoria Swedish ICT, Sweden)
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Coffee Break

Session S4: Human-Machine Systems

Adaptive Real-Time Threat Assessment Under Uncertainty and Conflict
Galina L. Rogova (Encompass Consulting, University at Buffalo, USA)
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Evaluation and Extension of the Cognitive Assistant System (COGAS) for User-Oriented Support of Air Target Identification
Emre Oezyurt (Fraunhofer Institute for Communication, Information Processing and Ergonomics (FKIE), Germany)
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Hybrid Cognitive Model for Semantic Discovery and Selection of Services
Shailja Sharma (National Institute of Technology Kurukshetra, India); Jagdeep Singh Lather (National Institute of Technology Kurukshetra, India); Mayank Dave (National Intitute of Technology Kurukshetra, India)
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Poster Session

Introducing a Task Prioritization Tool to a Complex Supervisory Control Environment
Olinda Rodas (SPAWAR SSC Pacific, USA)
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Dealing with Poorly Mapped Entities in Adaptive Object-Oriented World Modeling
Achim Kuwertz (Karlsruhe Institute of Technology, Germany); Jürgen Beyerer (Fraunhofer IOSB, Germany)

Breakfast

Keynote: Dr. Peter Hancock, Provost Distinguished Research Professor, University of Central Florida, "2. The Antecedents of Situation Awareness and its Future"

Session S5: Situation Awareness

Textual Risk Mining for Maritime Situational Awareness
Amir Hossein Razavi (University of Ottawa, Canada); Diana Inkpen (University of Ottawa, Canada); Rafael Falcon (Larus Technologies Corporation, Canada); Rami Abielmona (Larus Technologies Corporation, Canada)
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Situation Awareness in Airport Environment Based on Semantic Web Technologies
Gabriele Tamea (Universtà di Roma "La Sapienza", Italy); Antonio Cimmino (Zurich University of Applied Sciences, Switzerland); Francesco Delli Priscoli (University of Rome, "La Sapienza", Italy); Matteo Cusmai (Vitrociset, Italy); Andi Palo (University of Rome "La Sapienza", Italy); Donato Macone (University of Rome, "La Sapienza", Italy)
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Modeling Impact of Attacks, Recovery, and Attackability Conditions for Situational Awareness
Hasan Cam (Army Research Laboratory, USA); Pierre Mouallem (US Army Research Laboratory, USA); Bruno Sinopoli (Carnegie Mellon University, USA); Yilin Mo (Caltech, USA); Benjamin Nkrumah (Stevens Institute of Technology, USA)
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Coffee Break

Panel 1: "Situation Awareness in Security Domains"

The aim of this panel discussion is to provide a better understanding of the key elements of situation awareness (SA) for those tasked with providing security. Panelists will address the three key components of SA envisioned by Dr. Mica Endsley (1995): perception of elements in the environment, the comprehension of their meaning, and projection to the near future. Panelists will address a number topics ranging from the current state of security technology, including the current and potential benefits of incorporating SA principles, to recommendations for enhancing the field. Panelists range from experience in physical security (protection of property or personnel) to cyber security. Examples include providing security for a warehouse/apartment complex, an operating base in Afghanistan, a bank, or an information system

Lunch

Session S6: Understanding Situations

Inferring Relations and Individuals Relevant to a Situation: An Example
Mieczyslaw Kokar (Northeastern University, USA); Seokchul Shin (Agency for Defense Development, Korea); Brian Ulicny (VIStology, Inc., USA); Jakub Moskal (VIStology, Inc., USA)
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Staying Aware in an Evolving World — Specifying and Tracking Evolving Situations
Andrea Salfinger (Johannes Kepler University Linz, Austria); Werner Retschitzegger (Johannes Kepler University Linz, Austria); Wieland Schwinger (University of Linz, Austria)
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An Infrastructure for Distributed Rule-Based Situation Management
Caroline Rizzi Raymundo (University of Kent, United Kingdom); Patricia Dockhorn Costa (Federal University of Espirito Santo, Brazil); Joao Paulo Almeida (Federal University of Espirito Santo, Brazil); Isaac Pereira (Federal University of Espirito Santo, Brazil)

Coffee Break

Session S7: Monitoring & Surveillance

Conference Banquet

Breakfast

Keynote: Prof. Leo Motus, Tallinn University of Technology, Some Situation Awareness Issues in Complex Cognitive Systems, their Sources and Potential Antidote

Session S8: Data Analysis

Coffee Break

Panel 2: "Situation Awareness in Extreme Environments: Humanitarian Assistance and Disaster Relief"

The aim of this panel discussion is to explore the key elements of situation awareness (SA) within extreme environments. Extreme environments are considered to be complex, high stress, and/or demanding environments or occupations that often utilize human-technology systems. This panel will focus on the integration of SA as a means to advance humanitarian assistance and disaster relief. Examples include development of technology (e.g., robotics, automation, virtual reality, threat assessment technology), environmental risk and assessment (e.g., forest fires, hurricane relief, etc.), and communication of information including big data (e.g., cognitive radio networks, information fusion, network science, etc.).