

MAICS 2009 Conference Program

Saturday, April 18, 2009 (Kettler Hall 146)

8:00-8:50 Conference Registration and Breakfast

8:50-9:05 Welcome and Announcements

9:05-9:55 Plenary Talk I

Virtual Spaces: From the Past to the Future
Dr. Shi-Kuo Chang

10:00-10:50 Plenary Talk II

**Computing for Human Experience:
Sensing, Perception, Semantics, Social Computing, Web 3.0, and beyond**
Dr. Amit Sheth

10:50-11:05 Coffee Break

11:05-12:05 Session 1 Software Engineering & System Architecture
Chair: Peter Ng

11:05 An Architecture for a Mid-sized RoboCup Soccer Team
John Bodenschatz

**11:25 Exploring Software Quality with Static Code Analysis: Examining
Professional and Student Mistakes to Improve Undergraduate Instruction**
Jeff Stanford & David Erbach

**11:45 Abstract Software Design Framework: An Artificial Intelligence-Based
Framework for Building Software Systems**
Varadraj Gurupur, U. John Tanik, & Murat M. Tanik

12:05-1:20 Lunch & Program Committee Meeting (Kettler Hall 178)

1:20-2:40 Session 2 Genetic Algorithm & Data Mining
Chair: Michael Glass

1:20 Multiobjective Genetic Algorithm for a Graph Drawing Problem
Dana Vrajitoru

**1:40 SEMA: A New Paradigm for Distributed Genetic & Evolutionary
Computing**
Brandon D. Baker, Cedric Carter, & Gerry Dozier

- 2:00 The Three-Headed Monster: An Evolutionary Program**
Charles Guse & Dana Vrajitoru
- 2:20 Dependency Analysis Using CART: An Empirical Study with Stock Quote**
Nayana Mallikarjuna, Mark Bow, Jin Soung Yoo, & Aris Eracelous
- 2:40-2:55 Coffee Break**
- 2:55-4:15 Session 3 Recognition & Systems**
Chair: Jung Hee Kim
- 2:55 Refining Iris Templates via Weighted Bit Consistency**
Gerry Dozier, David Bell, Leon Barnes, & Kelvin Bryant
- 3:15 A Review Of Dimensionality Reduction Methods And Their Applications**
Augustine S. Nsang & Anca Ralescu
- 3:35 Exploitation of Domain Knowledge in the Recognition of Handwritten ZIP Codes**
Ibrahim Y. Chaaban & Michael R. Scheessele
- 3:55 Empirical Evaluation of Factors Affecting Heterogeneous Task Allocation**
George Thomas & Andrew B. Williams
- 4:15-4:30 Break**
- 4:30-5:50 Session 4 Intelligent Tutoring & Cognitive Science**
Chair: Jin Soung Yoo
- 4:30 Tutoring Dialogue Goals for Conceptual Understanding of Differential Equations: Preliminary Work**
Sekoya Waddy, Jung Hee Kim, & Michael Glass
- 4:50 Building a Knowledge Base for PHAST Medical Order Entry**
Dennis Carl Sundin, Jong Young Kim, & Martha W. Evens
- 5:10 Developing an Algebra Sublanguage for Tutorial Dialogues**
Van Uy Truong, Michael Glass, & Jung Hee Kim
- 5:30 Baptizing Meanings for Simple Concepts**
Iris Oved
- 6:30-7:45 Banquet at Holiday Inn IPFW**
- 7:45-8:45 Invited Guest Talk**

Sunday, April 19, 2009 (Kettler Hall 146)

7:30-8:30 Breakfast

**8:30-9:50 Session 5 Information Retrieval & Recognition
Chair: David Liu**

8:30 Automatic Recognition and Extraction of Geographic Named Entities from a Machine Readable Dictionary

Muhammad Asadur Rahman, Sunitha Patel, & Martha Evens

8:50 *ProbSim*-Annotation: A novel image annotation algorithm using a probability-based similarity measure

Chunsheng Fang & Anca Ralescu

9:10 On Efficient Access to Knowledgebases

Lubomir Stanchev

9:30 Query-Based Dimensionality Reduction Applied to Text and Web Data

Augustine S. Nsang & Anca Ralescu

9:50-10:05 Coffee Break

**10:05-11:25 Session 6 Learning & Agent System
Chair: Robert Sedlmeyer**

10:05 Visualization of a Library Collection based on Intelligent Topic Relations Created through Automated Learning

Eric G. Berkowitz & Kyle Schmitt

10:25 Integrated Scientific Reasoning in the *Scienceomatic 7B*

Joseph Phillips

10:45 Integrating Social Media as Content into a System for Document Classification And Visualization

Eric G. Berkowitz

11:05 Multiagent-based Particle Swarm Optimization with Parallel Processing

Raheel Ahmad, Yung-Chuan Lee, & Shahram Rahimi

11:25-11:35 Break

**11:35-12:35 Session 7 Visualization & Human Computer Interaction
Chair: Raheel Ahmad**

11:35 GraffiWii: the Wiimote as Text Entry Device
Joseph Henrich, Sofia Visa, & Mircea Ionescu

11:55 ClusterVision: An Interactive Visual Interface for Exploring Hierarchically Clustered Text Documents
Sandi Bryan, Paul Musson, & Cindy Peters

12:15 An Interactive Graphical Interface Presenting Data-Mined Customer Activity In Geotemporal Space
Michael Burton, Benjamin Aeschliman, Robin Mitchell, & Beomjin Kim

12:35-1:35 Lunch Break

**1:35-2:35 Session 8 Intelligence Systems & Network Security
Chair: Beomjin Kim**

1:35 Toward a General Application Framework for Intelligence Systems
Kyle Springer, Michael Henry, & Atsushi Inoue

1:55 Privacy-Based Access Control Engine in Web Based Environments - Case Study & Issue in Korea -
Kyong-jin Kim, Hyun-mi Jang, Ji-hee Jeoung, Seng-phil Hong, & Gang-shin Lee

2:15 Establishment of System Security for UTPB-CLTS
Dusty Piper, Ilhyun Lee, & Haesun Lee