

# Information Sciences Department Newsletter

Volume 4, Issue 4, October – December 2009

Sponsor: Dan Boger  
Editor: Mark Nissen

## Publications

### *Books*

none this quarter

### *Articles in Refereed Journals*

**Abdel-Hamid**, T.K. "Thinking in Circles about Obesity," *The Systems Thinker*, 20: 9 (2010), pp. 2-6.

Alberts, D.S. and **Nissen**, M.E., "Toward Harmonizing Command and Control with Organization and Management Theory," *International C2 Journal* 3:2 (2009), pp. 1-59.

### *Chapters in Books*

none this quarter

### *Articles in Conference Proceedings*

**Baer**, W., "Live/Virtual Cognitive Systems Simulation," proceedings of the 9th WSEAS International Conference on Applied Computer Science, Genova, Italy, 17-19 October, 2009, <http://www.wseas.us/books/2009/genova/ACS.pdf> .

**Gallup**, S. P., **MacKinnon**, D. J., **Zhao**, Y. **Robey**, J. and **Odell**, C., "Facilitating Decision Making, Re-use and Collaboration: A Knowledge Management Approach for System Self-Awareness" International Joint Conference on Knowledge Discovery, Knowledge Engineering, and Knowledge Management (IC3K), Madeira Portugal, 6-8 October, 2009.

**Zhao**, C., **Zhao**, Y. and **Kotak**, C., "The Collaborative Learning Agent (CLA) in Trident Warrior 08 Exercise," International Joint Conference on Knowledge Discovery, Knowledge Engineering, and Knowledge Management (IC3K), Madeira Portugal, 6-8 October, 2009.

### *Other Publications*

**Hutchins**, S. G., **MacKinnon**, D. J., **Roeting**, W. R. (2009), "Tasking, Processing, Exploitation and Dissemination (TPED) Management Findings and Lessons Learned in EMPIRE CHALLENGE 2009," Naval Postgraduate School Technical Report, NPS-IS-09-001, 15 December 2009.

**Nissen**, M.E., "Dynamic Fit and Misfit through Organizational Design: Conceptualization via Stability and Maneuverability," Naval Postgraduate School Technical Report NPS-46-09-001 (2009).

## Presentations (not included in conference proceedings above)

**Baer**, W., "Live/Virtual Cognitive Systems Simulation," invited Plenary Speaker at the 9th WSEAS International Conference on Applied Computer Science (ACS'09), Genova, Italy, 17-19 October, 2009

**Baer, W.**, "Applications of an Integrated Mind-Body Model of Consciousness," Science and Nonduality Conference, 23-25 October 2009, Embassy Suites/Marin Civic Center San Rafael, California, 2009.

**Hayes-Roth, F.** (2009). The National and International "Information Sharing Problem": Using XML to Enable Conceptual Modeling, Sharing and Collaboration of "Business Documents". Presented to Oracle, Redwood Shores, CA. October 8, 2009.

**Kimmel, R., Schacher, G., and MacKinnon, D.**, "Joint Intelligence Operations Center: A Baseline Business Process Model (BPM)," delivered to the Joint Staff (J2), JCS/J262, Enterprise Integration and Information Sharing, Pentagon, 15 December, 2009.

**Maule, R.**, "SOA Baseline Architecture Assessment: Final Report," delivered to OPNAV N2/N6, October, 2009.

**MacKinnon, D. J.**, "Facilitating Decision Making, Re-use and Collaboration: A Knowledge Management Approach for System Self-Awareness," International Joint Conference on Knowledge Discovery, Knowledge Engineering, and Knowledge Management (IC3K), Madeira Portugal, 6-8 October, 2009.

**MacKinnon, D. J.**, "The Collaborative Learning Agent (CLA) in Trident Warrior 08 Exercise," poster session, authors include: Zhou, C., Zhao, Y, and Kotak, C., International Joint Conference on Knowledge Discovery, Knowledge Engineering, and Knowledge Management (IC3K), Madeira Portugal, 6-8 October, 2009.

**Nissen, M.E.**, "Knowledge Dynamics: Key Principles for Afloat Knowledge Managers," invited presentation, Navy Afloat Knowledge Managers Course, San Diego, CA (December 2009).

**Nissen, M.E.**, "Dynamic Knowledge Principles & Learning Army Organizations: How Unthinkable?" invited plenary presentation, Army Operational Knowledge Management Conference, Kansas City, MO (October 2009).

**Nissen, M.E.**, "Knowledge Management Concepts & Training: Operational IM-KM Focus," invited plenary presentation, US Marine Corps Information Management Conference, Camp Pendleton, CA (October 2009).

**Pfeiffer, K., Kanevsky, V. and Housel, T.**, "Testing of complex systems: Information-driven strategies to reduce cost and improve reliability," INFORMS Annual Meeting, San Diego, Oct. 11-14, 2009.

## **Grants and Funding**

**Baer, W.**, "Improved Terrain Generation From UAV Sensors," Navy Modeling and Simulation Office, 1 January 2010 to 30 September 2010. \$47,700.

**Baer, W.**, "Interoperability Standards Cost Effectiveness Analysis Tool," Navy Modeling and Simulation Office 1 January 2010 to 30 September 2010. \$51,000.

**Bates, E.A., Gallup, S.P.**, "Network-Centric Warfare Acceleration," OPNAV N6F. \$48,300.

**Gallup, S.P.**, "Support to NAVNETWARCOM Innovation and Experimentation Program, Trident Warrior and Limited Objective Experiments (FY 10)," Naval Network Warfare Command (NAVNETWARCOM). \$300,000

**Gallup, S.P.**, "FORCEnet Experimentation and Analysis; Innovation and Experimentation Program, Trident Warrior," COMSPAWARSYSCOM. \$430,000.

Rick **Hayes-Roth**, Rapid Pro VIRT (RPV), architecture and technology transfer to USMC, MARCORSYSCOM PM Intelligence Systems, \$2,000,000. The USMC Intelligence System PEO has

established a Rapid Prototyping Team to accelerate production and delivery of intelligence capabilities to our warfighters. In this team, NPS has responsibilities for architecture and technology transition. The project will last 3 years and will achieve a cycle time of less than 6 months per iteration, by the end of the project. Many ISD faculty and staff will contribute, and the project is engaging others from NPS and other national labs and universities.

**Kimmel, R.A.**, "C3F Sea Trial Experimentation," ONR. \$125,000.

**Kimmel, R.A., Place, W.D.**, "Unmanned Aircraft Systems Support to C3F," NAVAIR. \$20,000.

**Roeting, W.R., Gallup, S.P., Wood, B.P.**, "U.S. Joint Forces Command (J2) Joint Battlespace Awareness ISR Integration Capability (JBAIIC) Research, Experimentation, Analysis and Reporting," US Joint Forces Command (USJFCOM)/Joint Transformation Command-Intelligence. \$225,000.

## **Awards**

none this quarter

## **Significant Professional Activities**

**Gallup, S.P., Irvine, N.J., Wood, B.P.** briefed Commander Third Fleet staff and NAVAIR staff on the Joint Multi Mission Electro-Optic System (JMMES) Joint Capabilities Technology Demonstration (JCTD) results. San Diego, CA, 16 December 2009.

**Maule, R.**, Executed Trident Warrior 2010 Laboratory 1 experiment at SPAWAR System Center San Diego 19 October - 6 November: Served as analysis lead for the experiment.

## **PhD Student Accomplishments**

Alicemary **Adams** and June **Lee** had an article nominated for the Best Paper Award (i.e., best overall paper, not best student paper) in the Knowledge Management Systems Track at the Hawaii International Conference on System Sciences.

Jack **Koons** successfully defended his dissertation proposal in the Information Sciences PhD Program and advanced to Candidate status.

John **Looney** successfully defended his dissertation proposal in the Information Sciences PhD Program and advanced to Candidate status.