

Information Sciences Department Newsletter

Volume 8, Issue 1 – 2, October – March AY 2013

Sponsor: Dan Boger
Editor: Mark Nissen

Publications

Articles in Refereed Journals

Han, X., Bui, H, Mandal, S., Pattipati, K.R., and **Kleinman, D.L.**, "Optimization-Based Decision Support Software for a Team-in-the-Loop Experiment: Asset Package Selection and Planning," *IEEE Trans. on Systems, Man and Cybernetics* 43:2 (2013), pp. 237-51.

Nissen, M.E. and **Bergin, R.D.**, "Knowledge Work through Social Media Applications: Team Performance Implications of Immersive Virtual Worlds," *Journal of Organizational Computing and Electronic Commerce* 23:1-2 (2013), pp. 84-109.

R. Rendon, T. Huynh and J. **Osmundson**, "Contracting Processes and Structures for Systems-of-Systems Acquisition," *Systems Engineering* Vol. 15, No. 4, December, 2012, pp. 471-482.

Books

None this quarter

Chapters in Books

Bordetsky, A., "Patterns of Tactical Networking Services", in: Anil Aggarwal (Ed.) *Cloud Computing Service and Deployment Model: Layers and Management* Hershey, PA: IGI (2012).

Articles in Conference Proceedings

Bordetsky, A. and **Dolk, D.** (2012), "A Conceptual Model for Network Decision Support Systems," *Proceedings of 46th Hawaii International Conference in System Sciences*, Jan. 6-9, 2013.

Edwards, C. Prathyush, M. , Shtessel, Y., and **Bordetsky, A.** (2012), "Connectivity Preservation in Mobile Wireless Multi-Agent/Node Mesh Networks," *IEEE Proceedings of 2013 American Control Conference*, Washington, DC.

Shtessel, Y, Edwards, C., Prathyush, M. , Cosby, A. and **Bordetsky, A.** (2012), "Predictive Modeling and Retaining Connectivity for Mobile Wireless Communication Network," *Proceedings of IEEE International Conference on Technologies for Homeland Security*, Boston.

Silja Meyer-Nieberg, Erik Kropat, Alex **Bordetsky**, and Stefan Pickl (2012), "Intercepting a Target with Sensor Swarm," *Proceedings of 46th Hawaii International Conference in System Sciences*, Jan. 6-9, 2013.

Other Publications

Barrett, M., "Lightweight Low Energy Antenna Form (LLEAF) Limited Objective Experiment (LOE) Report," submitted to CENTCOM leadership, Sept. 2012.

Bordetsky, A., MIO 12-2 Experimentation Report, NPS, 2012

Bordetsky, A., DHS Report on Persistent Tracking and Surveillance, NPS, April 2012

Presentations (not included in conference proceedings above)

Boger, D., “User Centric Cloud brief to US Air Force A2I leaders and staff in support of possible collaborative development efforts,” Advanced Collaboration Enterprise Services (ACES), December 2012.

Boger D., Wicks R.J., “User Centric Cloud (UC2) Project Technology Presentation,” brief to the National Geospatial Intelligence Agency (NGA) InnoVision Department leadership and sponsors, December 2012.

Bordetsky, A., Keynote Speaker: “Frontiers of Tactical Networking and Collaboration,” NATO ACT TIDE C4I Conference, Utrecht, Holland, April, 2012.

Bordetsky, A., Keynote Speaker (assisted by **Hudgens , Looney**, and SF Bay first responders): “Phenomena and Live Demonstration of Cyber Distortion Effects in Network-Enabled Operations,” NATO ACT TIDE C4I, Norfolk, October 2012.

Bordetsky, A., “TNT and MIO experimentation,” EUCOM Science and Technology Conference, Stuttgart, June 2012.

Gallup, S.P., Roeting, W.H., Wood, B.P, MacKinnon, D.J., McNally, S.M., Zhao, Y., Smith, D.M., McClain, B.J., “DISE presentation,” to President, Naval Postgraduate School, RDML J. Tighe, & Acting Provost, D. Moses, Monterey, CA, 25 March 2013.

Godin, A.A., “Technical Perspectives on Big Data in the Maritime Battlespace” brief to the AFCEA "Big Data in the Maritime Battlespace" Conference, N. Charleston, October 2012.

Godin, A.A., “Tactical Edge & Cloud: Can we run Big Data Analytics there?” brief to the Multi Agency Collaborative Environment (MACE) Semantic Interoperability meeting, December 2012.

Kendall, A., Kerr, A., Das, A., Davis, A., Garcia, C. “Challenges When Integrating Computer Science Undergrads Into DOD IT, ” 2012 STEMtech Conference, Kansas City, Missouri, 28-31 Oct 2012.

Miller, S.A., “User Centric Cloud (UC2) Update to the Joint Development and Technology Insertion Working Group,” in support of Navy cloud development and “Big Data” efforts, December 2012.

Oros, C.L. and Jones, M., “USSOCOM-NPS Field Experimentation Program (TNT),” brief to MG Douglas P. Anston, USAR, USSOCOM J-3, 30 November 2012.

Wicks, R.J., “User Centric Cloud (UC2),” brief to the AFCEA Low country Chapter - Big Data in the Maritime Battlespace Symposium, October 2012.

Grants and Funding

Boger, D., User Centric Cloud in Support of Beyond Line of Sight Command and Control; US Air Force A2I (via BLOS C2); \$3,000,000

Bordetsky, A., Low visibility detector networking (mio experimentation); DTRA; \$240,000.

Bordetsky, A., Manet tw network management system: heat map interface; USMC – Marine Corps Warfighting Lab; \$230,000.

Bordetsky, A., Student concept development for tactical networking; PACOM-NAVAL FACILITY; \$25,000.

Bordetsky, A., Field exp program (MIO and TNT; Co-PI with Ray Buettner); USSOCOM; \$50,000.

Bordetsky, A., Persistent tracking and surveillance; DHS; \$170,000.

Bordetsky, A., Space-based tactical networking; Cisco Systems; \$70,000.

Godin, A.A., Navy Cloud Target Architecture,” Space and Naval Warfare Systems Command (SPAWAR). \$30,000.

Osmundson, J., Assessment of Technologies and Capabilities Impacting Maritime Security, National Maritime Intelligence-Integration Office, \$100,000.

Awards

Das, A., awarded Certificate of Recognition for work in Fleet Innovation Research Environment (FIRE) from Naval Postgraduate School, 11 October 2012.

Maule, R.W., awarded Certificate of Recognition for work with Trident Warrior from Naval Postgraduate School, 11 October 2012.

Utschig, J.M., Irvine, N.J., Garza, V.R. Schulz, R.H. each awarded Meritorious Civilian Service Award for work in BLOS C2 (Beyond Line of Site, Command and Control) from Naval Postgraduate School, 11 October 2012.

Wood, B.P., Gallup, S.P., McNally, S.M. each awarded Meritorious Civilian Service Award for work in BLOS C2 (Beyond Line of Site, Command and Control) from Headquarters, United States Air Force, 11 October 2012.

Zhao, Y. awarded Certificate of Recognition for work with Lexical Link Analysis (LLA) from Naval Postgraduate School, 11 October 2012.

Significant Professional Activities

Bordetsky, A., Minitrack Chair: Network DSS: Mobile and Social Sensor Networks for Man-Machine Collaboration, In: *Proceedings of 46th Hawaii International Conference in System Sciences*, Jan. 4-7, 2012

In recognition of his teaching, research, and direction of the NPS Field Experimentation program, Ray **Buettner** was granted tenure on 28 March 2013.

The Field Experimentation team held the 3rd Installment of the Joint Interagency Field Exploration (JIFX) event 11-14 February at Camp Roberts, CA. Structured as a multi-institutional, semi-structured learning environment (MISSLE), JIFX pairs capability gaps identified by the Unified Combatant Commands (COCOMs) with cutting edge research from government research labs, private industry, and academia. The 13-2 event hosted more than 300 people from over 100 different organizations representing 56 different experiments.

For the 15th year in a row, **David Kleinman** was the Organizer and Chair for Track 11 (Diagnostics and Prognostics for Aerospace Systems) at the Annual IEEE Aerospace Conference held at Big Sky Montana, March 2-9, 2013. The Track was comprised of 11 sessions with ~40 papers (including a panel discussion)

covering such topics as Prognostics and Health Management (PHM) for electronics, subsystems and vehicles, including space systems and their human astronauts. (see www.aeroconf.org)

PhD Student Accomplishments

Ascef, R., "Analysis of Supply and Distribution Logistics from Brazilian Air Force", *Sustainable Business International Journal* - (2013), [http://www.sbijournal.uff.br/index.php/sbijournal/article/view/41-ISSN 1807-5908](http://www.sbijournal.uff.br/index.php/sbijournal/article/view/41-ISSN%201807-5908).

Joe **Billingsley**'s work to launch the Military Cyber Professionals Association was featured in two articles. http://www.navy.mil/submit/display.asp?story_id=73249 and <http://associationsnow.com/2013/04/new-cyber-warfare-association-will-address-evolving-military-needs/>

Carrick **Longley**, Bryan **Hudgens** and Bryan **Pickett** passed their Written and Oral Qualifying Exams.

Rollie **Wicks** was hand-selected by Navy Warfare Development Command (NWDC) Concepts Branch to participate in the Chief of Naval Operations (CNO) Disruptive Thinkers Group (DTG).

The department actively encourages the students with student-centric activities by providing them with job-ready training from basic to advanced level with its exclusive Infosys campus connect program. Some of the active events organized by the department. Conducting Mock Interviews to juniors from seniors. Encouraging students to organize and participate in various student clubs.Â Upcoming Events for 'Department of Information Science & Engineering'. No upcoming events. Newsletters.Â Sign-up for our newsletter: Receive updates and news about our achievements, events and seminars. Copyright Â© 2019, CMR Jnanadhara Trust.