

W. JOHN KRUSE

EDUCATION & QUALIFICATIONS

PhD, UNIVERSITY OF ARIZONA, 2001

Major – Management Information Systems, Major Advisor – Dr. Jay Nunamaker

MBA, UNIVERSITY OF WYOMING, 1993

Major - Management

BS, UNIVERSITY OF WYOMING, 1989

Major - Management Information Systems with Computer Science Option

U.S. SECURITY CLEARANCE - SECRET

PROFESSIONAL EXPERIENCE

LEAD INFORMATION SYSTEMS ENGINEER

The MITRE Corporation, November 2006 - Present

Develops and communicates strategic vision and operational direction for information technologies for decision support and Network-Centric Operations. Current efforts focus on the next generation Air Operations Center Weapons System, the central airpower planning, execution and assessment system-of-systems.

DIRECTOR OF SYSTEMS DEVELOPMENT

University of Arizona, Center for the Management of Information, February 2000 – September 2006

Performed research, supervisory and administrative duties in support of a wide variety of projects focused on decision support, information technology, collaboration and Network-Centric Operations.

GRADUATE ASSOCIATE

University of Arizona, August 1996 - February 2000

SUPERVISORY COMPUTER SPECIALIST

United States Property and Fiscal Office, February 1994 - August 1996

Supervised the personnel and operations of an automated data processing installation.

ARTILLERY OFFICER

1-180th Field Artillery Battalion, Arizona Army National Guard, 1991 - 2001

Commanded A Battery, 1-180th Field Artillery and C/2-180th Field Artillery

SYSTEMS ADMINISTRATOR/APPLICATIONS PROGRAMMER

Options & Choices, Inc., October 1989 - December 1993

AIR TRAFFIC CONTROLLER

349th Air Traffic Control Company, Wyoming Army National Guard, 1984-1990

GRADUATE ASSISTANT

University of Wyoming, June 1993 - December 1993

MAJOR PROJECTS

- Air Operations Center Weapons System – Working with a major Air Force system-of-systems to develop strategic and operational direction.
- Network Centric Warfare Training – Trained hundreds of military, government and industry participants throughout the world in over twenty-five Network-Centric Operations courses primarily sponsored by the U.S. Office of Force Transformation
- Standard Missile Collaborative Environment – Coordinating the development and fielding of a large-scale collaborative environment based on Network-Centric Operations concepts.
- StrikeCom – Leading the team that continuing development of an interactive wargame used to teach Network-Centric Warfare tenets for the Office of Force Transformation.
- AutoID (Automated Intent Detection) – Supervising team building a prototype that scans video to automatically identify suspicious movements and nonverbal cues.
- CommandNet – Integrated with the U.S. Navy’s Third Fleet to derive requirements and develop an online collaborative logging tool for use throughout the fleet.
- Agent99 (Automated Deception Detection Prototype) – Supervising programming team to develop a prototype for automatically searching text for possible deception.
- Collaborative Metrics Package – Developed a research program with U.S. Navy N6 to assess the effectiveness and usage of collaborative technologies.
- Tactical Anti-Terrorist Information and Planning System (TATIPS) – Managed the development of a Lotus Domino system to support global force protection on naval ships.
- Humanitarian Aide/Disaster Relief – Worked with the U.S. Navy Third Fleet and United Nations agencies to develop standard practices, information systems and interfaces.
- Group Facilitation – Performed group support system research and facilitated myriad government, military and commercial groups. Facilitated groups in the collaborative writing of documents and manuals with the U.S. Army.

SELECTED PUBLICATIONS AND PROCEEDINGS

(Full list available on request)

- Participant-driven GSS: Quality of Brainstorming and Allocation of Participant Resources. Helquist, J.H., Santanen, E.L., & Kruse, J. (2007) In R. H. Sprague, Jr. (Ed.) *Proceedings of the Fortieth Hawaii International Conference on Systems Sciences*, Los Alamitos, CA: IEEE Computer Society Press.
- Deception and Intention Detection. Burgoon, J.K., Jensen, M.L., Kruse, J., Meservy, T.O. & Nunamaker, J.F. (2007). *Handbooks in Information Systems*, Vol. 2, Chapter 8. Edited by H Chen, TS Raghu, R Ramesh, A Vinze and D Zeng. Elsevier B.V.

- Network centric operations case study: Task Force 50 during Operation Enduring Freedom. Garstka, J., Holloman, K. Balisle, C.W., Adkins, M. & Kruse, J., Abridged Report Version 1.0, (2006) *Transformation Case Study Series*, Office of Force Transformation, Office of the Secretary of Defense.
- Detecting concealment of intent in transportation screening: a proof-of-concept. Burgoon, J.K., Twitchell, D. P., Jensen, M. L., Adkins, M., Kruse, J., Deokar, A., Lu, S., Metaxas, D., Nunamaker, J.F., & Younger, R.E. (In press). *IEEE Intelligent Systems*.
- Deception Detection through Automatic, Unobtrusive Analysis of Nonverbal Behavior. Meservy, T.O., Jensen, M.L., Kruse, J., Twitchell, D.P., Tsechpenakis, G., Burgoon, J.K., Metaxas, D.N., Nunamaker, J.F., *IEEE Intelligent Systems*. September 2005, 20(5), 36-43.
- The Technology Trap. Kruse, J., Adkins, M., *Proceedings of the U.S. Naval Institute*. August, 2005, 131(8).
- Network Centric Warfare in the U.S. Navy's Fifth Fleet: Web-Supported Operational Level Command and Control in Operation Enduring Freedom. Adkins, M., Kruse J., Case Study for Office of Force Transformation, Office of the Secretary of Defense.
- A Technology Transition Model Derived from Field Investigation of GSS Use Aboard U.S.S. CORONADO. Briggs, R.O., Adkins, M., Mittleman, D., Kruse, J., Miller, S., Nunamaker, J.F., *Journal of Management Information Systems*. Winter, 1998-99, 15(3), 151-193.
- Group support systems for very large groups: A peer review process to filter brainstorming input. Helquist, J.H., Kruse, J., Adkins, M. (2006). *Proceedings of the Americas Conference on Information Systems (AMCIS)*, Acapulco, México August, 2006.
- Developing large scale participant-driven group support systems: An approach to facilitating large groups. Helquist, J.H., Kruse, J., Adkins, M. (2006) In R. H. Sprague, Jr. (Ed.) *Proceedings of the Thirty-Ninth Hawaii International Conference on Systems Sciences*, Los Alamitos, CA: IEEE Computer Society Press.
- Automatic Extraction of Deceptive Behavioral Cues from Video. Meservy, T. O., Jensen, M. L., Kruse, J., Burgoon, J. K., & Nunamaker, J. F. (2005). In P. Kantor & G. Muresan & F. Roberts & D. Zeng & F.-Y. Wang & H. Chen & R. Merkle (Eds.), *Intelligence and Security Informatics: Proceedings of the IEEE International Conference on Intelligence and Security Informatics ISI 2005, Atlanta, GA, USA* (Vol. 3495, pp. 198-208). Berlin: Springer – Verlag
- Moving toward intent detection: A tool-based approach. Burgoon, J.K., Adkins, M., Kruse, W.J., Jensen, M.L., Deokar, A. Twitchell, D.P., Lu, S., Metaxas, D.M., Nunamaker, J.F., Jr., & Younger, R.E. (2004) *IEEE proceedings from the Conference on Intelligent Transportation Systems*. Washington, D.C. IEEE.
- Network Centric Warfare in the U.S. Navy's Fifth Fleet. Kruse, J., Adkins, M., Holloman, K. (2005) *Proceedings of the Thirty Eighth Hawaii International Conference on System Sciences, Hawaii*.
- Ubiquitous Computing: Omnipresent Technology in Support of Network Centric Warfare. Adkins, M., Kruse, J., Younger, R. (2002) *Proceedings of the Thirty Fifth Hawaii International Conference on System Sciences, Hawaii. Nominated for Best Paper*

Experiences using Collaborative Technologies with the United Nations and Multi-National Militaries: Rim of the Pacific 2000 Strong Angel Exercise in Humanitarian Assistance. Adkins, M., Kruse, J., Damianos, L., Brooks, J., Younger, R., Rasmussen, E., Rennie, Y., Oshika, B., Nunamaker, J. (2001) *Proceedings of the Thirty Fourth Hawaii International Conference on System Sciences, Hawaii.*

Improving Operational Situational Awareness with Collaborative Technologies. Kruse, J. (2000) *Proceedings of the Thirty Third Hawaii International Conference on System Sciences, Hawaii.*

Developing a Virtual Environment to Support Disaster Relief with the United States Navy's Commander Third Fleet. with Adkins, M., Kruse, J., McKenna, S., Cuyugan, A., Nunamaker, J., Miller, S., Younger, R. (2000) *Proceedings of the Thirty Third Hawaii International Conference on System Sciences, Hawaii.*