

Curriculum Vitae

Cynthia M Nikolai
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(a) Professional Preparation

- B.S. in Mathematics, Villanova University, 2000
- M.S. in Computer Science, University of Massachusetts - Amherst, 2006
- PhD in Computer Science, University of Notre Dame, 2015
- M.S. in Applied and Computational Mathematics and Statistics, 2018

(b) Appointments

Jun 2015-present	Consultant, Collaborative Scientist
Jan 2015 – Jun 2015	Visiting Scholar, University of Notre Dame
Jul 2005 – Dec 2015	PhD Candidate, University of Notre Dame. Notre Dame, Indiana.
May 2009-Feb 2010	EOC IT & Systems Support; Emergency Management Specialist, Miami-Dade Emergency Operations Center, Miami, FL
May 2009-Dec 2015	GAANN Fellow, US Department of Education
Jan 2008 – May 2008	Teaching Assistant, Computer Science & Engineering, University of Notre Dame, Indiana.
Oct 2004 – Jul 2005	ICBM Combat Crew Commander, Alternate Command Post (ACP), 490th Missile Squadron, Malmstrom AFB, MT
Apr 2004 – Oct 2004	ICBM Combat Crew Commander, 490 th Missile Squadron, Malmstrom AFB, MT
Apr 2003 – Apr 2004	ICBM Combat Crew Instructor Deputy Commander, 341 st Operations Support Squadron, Malmstrom AFB, MT
Feb 2003 – Apr 2003	ICBM Combat Crew Flight Deputy Commander, 490th Missile Squadron, Malmstrom AFB, MT
Jan 2003 – Apr 2004	ICBM Combat Crew Deputy Commander, Alternate Command Post (ACP), 490 th Missile Squadron, Malmstrom AFB, MT
Jan 2002 – Jan 2003	ICBM Combat Crew Deputy Commander, 490 th Missile Squadron, Malmstrom AFB, MT
Apr 2001 – Jan 2002	ICBM Operations Crew Scheduler, 490 th Missile Squadron, Malmstrom AFB, MT
May 2000	Distinguished Graduate, AFROTC Detachment 750, Philadelphia, PA

(c) Products

5 Products Related to PhD Expertise:

- **Nikolai, C., Becerra-Fernandez, I., Prietula, M., & Madey, G. (2009).** Project ensayo: designing a virtual emergency operations center. *Proceedings of the IEEE International Conference on Systems, Man, and Cybernetics*, San Antonio, Texas.

- **Nikolai, C.** (2014, December). SimEOC: A virtual emergency operations center (vEOC) simulator for training and research. PhD Dissertation, Department of Computer Science and Engineering, University of Notre Dame, Notre Dame, IN.
- **Nikolai, C., Johnson, T., Prietula, M., Becerra-Fernandez, I., & Madey, G.** (2015). SimEOC: a distributed web-based virtual emergency operations center simulator for training and research. *International Journal of Information Systems for Crisis Response and Management*, 7(1), p1-21.
- **Nikolai, C., Johnson, T., Prietula, M., Becerra-Fernandez, I., & Madey, G.** (2015). Design principles for crisis information management systems: from closed local systems to the web and beyond. *International Journal of Information Systems for Crisis Response and Management*, 7(4), p26-45.
- **Nikolai, C., Treboniak, C., Heller, P., & Madey, G.** (2016). About emergency managers and their tools: what emergency managers want from a business perspective. *International Journal of Information Systems for Crisis Response and Management*, 8(4), p1-16.

5 Other Significant Products:

- **Nikolai, C., and Madey, G.** (2009, March). Tools of the trade: a survey of various agent based modeling platforms, *Journal of Artificial Societies and Social Simulation*, 12(2)2.
- **Madey, G., Becerra-Fernandez, I., Nikolai, C., & Prietula, M.** (2010). A training and research simulator for emergency management. *Institute for Operations Research and the Management Sciences (INFORMS)*, Austin, Texas.
- **Nikolai, C., Madey, G., Becerra-Fernandez, I., & Prietula, M.** (2010). Ensayo: a distributed, web-based virtual emergency operations center for training and research. *The 7th International Community on Information Systems for Crisis Response and Management (ISCRAM) Conference PhD Colloquium and Poster Session*, Seattle, WA.
- **Nikolai, C., Madey, G., Becerra-Fernandez, I., and M. Prietula** (2010). Ensayo: a virtual emergency operations center simulator for training and research. *Winter Simulation Conference*, Ph.D. Colloquium and Poster Session, Baltimore, MD.
- **Nikolai, C., Wright, T., Johnson, T., and Prietula, M., & Madey, G.** (2015, April) Ensayo: A Virtual Emergency Operations Center Simulator for Training and Research. Poster Presentation, Preparedness Summit, Atlanta, GA.

(d) Synergistic Activities

- **Mentor** for University of Notre Dame's Research Experiences for Undergraduates students, Summer 2010
- ***Emergency Operations Center (EOC) Activations:***
 - Miami-Dade EOC Activation in support of the Super Bowl XLIV, Feb 2010
 - Miami-Dade EOC Activation in support of the Pro Bowl, Jan 2010
 - Miami-Dade EOC Activation in support of the Haitian Relief Effort, Jan 2010
- ***Miami-Dade Emergency Operations Center Exercises:***
 - Miami-Dade Emergency Operations Center (EOC) Terrorism Response Drill, July 2009
 - Miami-Dade Emergency Operations Center (EOC) Annual Exercise, June 2009
 - Miami-Dade Emergency Operations Center (EOC) Annual Exercise, June 2008
 - Miami-Dade Emergency Operations Center (EOC) Annual Exercise, June 2007
- **Professional Development Series Certification, FEMA**