DR. MARY ANN HOPPA

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EDUCATION

PhD (Computer Science – Software Reliability), Old Dominion University, Norfolk, VA USA (1/1995)
MS (Computer Science – Algorithm Analysis), George Mason University, Fairfax, VA USA (12/1985)
BS (Applied Mathematics), Auburn University, Auburn, AL USA (6/1981)
BA (French), Auburn University, Auburn, AL USA (6/1981)

Distance Education Certification, Norfolk State University, Norfolk, VA USA (expected 12/2016)
eCommerce Certificate, Anne Arundel Community College, Arnold, MD USA (5/2015)
Maryland Online Teaching Adjunct Certificate, marylandonline.org/coat/ (7/2014)
Executive MBA Certification, Old Dominion University, Norfolk, VA USA (3/2010)

TEACHING EXPERIENCE

Visiting Professor, Norfolk State University Computer Science Department (9/2016 – present)
Teach foundational and advanced computer science courses to 60 – 120 students per semester. Deliver 50 face-to-face contact hours per course. Create & manage complementary Blackboard eLearning content. Advise students on senior research projects. Support scholarly and grant activities of *Cybersecurity Center of Excellence*. Contribute to university & department strategic outcomes in the areas of retention, professional development and metrics.

***Collegiate Traveling Faculty*, University of Maryland University College Europe (4/2015 – 8/2016)**
Graduate School Assistant Professor. Used Desire2Learn platform to deliver hybrid courses in cybersecurity, digital forensics, cryptography, privacy & protection strategies, information technology and project management to non-traditional students throughout Europe. Adapted standard syllabi, assignments, online classroom content for 8-, 10- and 12-week sessions. Developed/delivered project-based learning activities for up to 50 face-to-face contact hours per course.

***Faculty adjunct*, DeVry University USA (9/2010 – 6/2011)**
8-week hybrid delivery model; courses included *PC Hardware and Software with Lab (CompTIA A+ Prep)*, *Programming Logic & Design* and *C++ Programming*.

***Instructor*, Adult Learning Center in Virginia Beach, VA USA (9/2008 – 6/2009)**
Developed and delivered skill-oriented technical seminars, including *Social Networking*, *Online Reputation Management*, and *Podcasting*.

***Instructor*, MITRE Corporation USA (various)**
Conceived, developed & delivered peer-to-peer technical and business courses in corporate university system, including *Object-Oriented Programming with C++, Introduction to C++*, and *Building Professional Stature*. Developed & delivered system prototype transition training for third-party contractors, including conceptual/functional design, implementation, problem/trouble report vetting, and maintenance.

SELECTED PROFESSIONAL TRAINING

Technical courses including *InfoPath, Survey Design, Sharepoint Administration Fundamentals, Information Technology Infrastructure Library (ITIL) Foundations* and *Project Management Institute (PMI) Project Management Professional (PMP)*. **Business webinars** including *Working Remotely, Virtual Teams, Executive Briefings, Secrets of Successful Presentations*. **Courses** such *as Business Communication, Principles of Management*, and *Global Business*.

RESEARCH INTERESTS

* Cybersecurity
* Cyberpsychology
* Information visualization; metrics
* Games-with-a-purpose
* Micro-learning; just-in-time guidance
* Knowledge management in-the-flow

INDUSTRY EXPERIENCE

Knowledge Management (KM) Principal, **MITRE Corporation, McLean, VA USA (7/2011 – 4/2014)**
   Initiated business process guidance model using "just-in-time" and micro-learning techniques. Piloted social, crowd-sourced approaches to performance recognition and peer-to-peer knowledge sharing. Awarded internal research grant to distribute corporate news via text-to-voice and navigation-by-voice. Additional responsibilities included:

* Partnered with business unit leads to implement KM efforts across global, federally-funded R&D centers.
* Fostered collaboration, retention of critical knowledge, intellectual capital reuse.
* Harvested expertise, established guidance, developed training and knowledge exploitation tools.
* Led over a dozen division staff in selection and distribution of $40K annually in corporate KM awards.
* Planned & hosted global, multi-point KM speaker series, including panel discussions and live Q&A.
* Designed, created and maintained Sharepoint sites for hosting authoritative enterprise content.
* KM and STEM delegate to external conferences and consortia, including advanced working groups.
* Coordinated strategic messaging and communication campaigns.

Principal Information Systems Engineer, **MITRE Corporation, Hampton, VA USA (10/1987 – 7/2011)**
   Hired and managed teams of information management & architecture technologists. Provided expertise in multiple disciplines to U.S. and NATO military and government agencies, including end-to-end command-and-control systems development. Performed rapid prototyping using cutting-edge technologies, state-of-the-practice programming languages and development methodologies. Led technology exchanges and represented U.S. interests in collaboration with partner nations. Additional accomplishments included:

* Successfully engaged new business and research opportunities to expand organic work programs.
* Developed information architecture framework to support strategic analysis & process improvements.
* Devised innovative decision-making maturity model for capability gap analysis & prioritization.
* Built strategic roadmaps for CIOs/CTOs to bootstrap legacy knowledge operations into 21st century.
* Authored social media & internet technology guidance for government organizations.
* Internationally published interoperability, internet technology & digital culture researcher.

Prior to joining MITRE, Dr. Hoppa developed mathematical models and scientific programs for U.S. Department of Defense electronic warfare applications as a contractor in Washington, DC USA.

SELECTED PROFESSIONAL / COMMUNITY ACTIVITIES

Science, Technology, Engineering and Mathematics (STEM) Evangelist (1995 – present)
* Pioneered corporate outreach programs in Southeastern Virginia USA; liaison to local colleges and universities
* Coordinated nationwide STEM volunteers; middle-school and above engagements
* Created internship model; prototyped STEM metrics and outcome-based training portfolios

Executive Board chair for Community Chorus (2008 - 2010)
* Created & grew digital presence; cultivated audiences & partnerships; negotiated contracts
* Implemented 3-year strategic plan; authored first-ever performance standards
* Led artistic director selections; negotiated commissioned works
* Organized, publicized, hosted community outreach events; developed financial sponsors & host venues

AWARDS

Outstanding Civilian Service Award, *U.S. Army (2016)*

SELECTED PUBLICATIONS

"Cloud Computing: Tactical User Requirements," Institute for Defense and Government Advancement NCW Conference Proceedings, January 2010.

"Independently Secured Networks," Institute for Defense and Government Advancement NCW Conference Proceedings, January 2009

"C2 Core and UCore Message Design Capstone," with M. David Allen, Catherine Macheret, MTR090357, The MITRE Corporation, September 2009.

"Software Reliability Primer," with V. Felarca and O. Elton, MTR090236, The MITRE Corporation, July 2009.

"Microformat-Enabling Department of Defense Information Sources," with Charles Altizer, SemTech 2009 Conference Proceedings, June 2009.

"Chapter 1 – Closing the Gap Between XML and Relational Database Technologies: State-of-the-Practice, State-of-the-Art, and Future Directions," with Dr. Irena Mlynkova, Chapter 1 in *Open and Novel Issues in XML Database Applications: Future Directions and Advanced Technologies*, IGI Global Publishing, March 2009.

"Online Reputation Management: Putting Your Best [Cyber]Foot Forward," XTech 2008 Conference Proceedings, May 2008.

"Reuse versus Reinvention: How Will Formal Methods Deal With Composable Systems?," Langley Formal Methods 2008 Conference Proceedings, May 2008.

"Can't See the TRIZ for the Forest? What an Alternative Problem-Solving Perspective Might Offer DoD," 20th Annual Systems and Software Technology Conference Proceedings, May 2008.

"A Lightweight Approach to Building the Department of Defense's Semantic Web," with Rosamaria S. Morales, XML 2007 Conference Proceedings, December 2007.

"My Teenager is a Future Warfighter?" Systems and Software Technology Conference, June 2007

"'Wicked' Project Management," with R. W. Miller, Managing and Engineering Complex Systems (MECS) 2007 Conference Proceedings, October 2007.

"A Model for Successful Engineering Internship," INCOSE 2007 Conference Proceedings, June 2007.

"Generational Challenges to the Net-Centric Future," 19th Annual Systems and Software Technology Conference Proceedings, June 2007.

"An Effects-Based Metrics Framework: Measuring Progress toward a Net-Centric DoD," Defense Standardization Program Journal, April/June 2007, pp. 18-24.