Institution: U.S. Naval Academy Date: 29 Feb 2012
Program: Systems Engineering

1. Name: Bradley E. Bishop

2. Education – degree, discipline, institution, year

   BS, Electrical Engineering, Michigan State University, 1991
   MS, Electrical Engineering, University of Illinois at Urbana-Champaign, 1994
   PhD, Electrical Engineering, University of Illinois at Urbana-Champaign, 1997

3. Academic experience – institution, rank, title (chair, coordinator, etc. if appropriate), when (ex. 1990-1995), full time or part time
   - 2008 – present: Full Professor with Tenure, Weapons and Systems Engineering, USNA, full time
   - 2002 – 2008: Associate Professor with tenure, United States Naval Academy, Weapons and Systems Engineering, USNA, full time
   - 1997 - 2002: Assistant Professor, Weapons and Systems Engineering, USNA, full time
   - 1994 - 1997: University of Illinois at Urbana-Champaign, Research Assistant, Coordinated Science Laboratory
   - 1994 - 1995: University of Illinois at Urbana-Champaign, Teaching Assistant, Department of Electrical and Computer Engineering and the Department of General Engineering.

4. Non-academic experience – company or entity, title, brief description of position, when (ex. 1993-1999), full time or part time

5. Certifications or professional registrations
   None

6. Current membership in professional organizations
   ASEE

7. Honors and awards
   Honors Societies:
   Sigma Xi
   Phi Kappa Phi

   Awards:
   - Winner, USNA Professor Theodore J. Benac Civilian Faculty Award for Excellence in Teaching, 2008.
   - Winner, 2005 Raouf Ali Raouf Award for Excellence in Engineering Instruction at USNA
   - Merle K. Miller Award for best CoED Journal paper on Educational Methods, 2003.
   - Best Video Award, 1999 IEEE International Conference on Robotics and Automation.

8. Service activities (within and outside of the institution)

   Member, USNA Promotion and Tenure Committee, 2011 – present

   Student Activity Coordinator, Naval Academy Science and Engineering Conference, 2010 – present

   Member, Board of Directors, Computers in Education Division (CoED) of the American Society for Engineering Education (ASEE), 2006 – present.

   Chair, Division of Engineering and Weapons Curriculum Committee, 2005 – 2009.

   Faculty Technical Director, Systems Engineering, 2010 – present.

Faculty Senate Curriculum Committee 2005 – 2009.

Program Director, Honors Systems Engineering, 2008 – present.

Reviewer for many IEEE and ASME journals and conferences

Departmental Investment Budget Coordinator, Laboratory Equipment Manager, 2004 – 2011.

Member, Systems Engineering ABET committee, 2001 – present.

Course Coordinator for: ES201, ES202, ES451, ES462, ES487G, ES502, ES503.

9. Briefly list the most important publications and presentations from the past five years – title, co-authors if any, where published and/or presented, date of publication or presentation

Bishop, B. E., "Formation Control of Underactuated Autonomous Surface Vessels using Redundant Manipulator Analogs," accepted, 2012 IEEE International Conference on Robotics and Automation, May 2012.

Honan, S. and Bishop, B. E., "Low-Cost Salinity Sensor Increases Economic Yields and Environmental Sustainability for Small Plot Shrimp Farmers," IEEE Global Humanitarian Technology Conference, Seattle, WA, Oct. 30 – Sept. 1, 2011.

Bishop, B. E., Bradshaw, J., Keef, C. and Taschner, N., "A Systems Engineering Approach to the Development of an Autonomous Sailing Vessel," 2011 World Robotic Sailing Conference, Lubek Germany, August 2011.

Bishop, B. E., "Teaching Emerging Technologies using a Sociotechnological Development Model," Proc. of the 2009 ASEE Annual Conference and Exposition, June 2009, CD-ROM.

Bishop, B. E., "Swarm-Based Object Manipulation Using Redundant Manipulator Analogs," 2008 IEEE International Conference on Robotics and Automation, April 2008, pp. 1495 - 1500.

Keegan, C. and Bishop, B. E., "AquaMonkey: A Novel Multi-Mode Robotic Vehicle," Proceedings of the 2007 Conference on Intelligent Robots and Systems, 29 Oct – 1 Nov 2007, video + pp. 2557 - 2558.

Bishop, B. E., "On the use of Capability Functions for Cooperative Objective Coverage in Robot Swarms," Proc. of the 2007 IEEE International Conf. on Robotics and Automation, April 2007, pp. 2306 – 2311.

10. Briefly list the most recent professional development activities

Attended ACCeSS group meeting, July 2011, July 2010, July 2009
Attended ACCeSS USV subgroup meeting, Sept. 2011