

Institution: U.S. Naval Academy  
Program: Systems Engineering

Date: 5 February 2012

1. Name: Jenelle A. Piepmeier

2. Education:

|     |                        |                                 |      |
|-----|------------------------|---------------------------------|------|
| BS  | Engineering            | LeTourneau University           | 1993 |
| MS  | Mechanical Engineering | Georgia Institute of Technology | 1995 |
| PhD | Mechanical Engineering | Georgia Institute of Technology | 1999 |

1. Academic experience:

United States Naval Academy

Initial appointment: Assistant Professor 1999

Promotion: Associate Professor 2004

2. Certifications or professional organizations:

N/A

3. Current Memberships:

N/A

7. Honors and Awards:

- 1<sup>st</sup> Place Semantic Robot Vision Challenge: Robot League – Team Advisor with LT J. Searock. December 2009
- Honorable Mention for the Benac Civilian Faculty Teaching Excellence Award, 2009, 2010, 2011, 2012.
- Invited Speaker at the Connecticut Microelectronics and Optoelectronics Symposium Program, Wednesday March 11, 2009.
- Nominated for the 2008 Raouf Ali Raouf Award for excellence in teaching engineering
- Invited Speaker at the 2008 Trinity College Fire Fighting Home Robot Competition and Symposium. One of three invited speakers.

4. Service Activities

Systems Engineering ABET coordinator (2009-present)

Hiring Committee (2010-present)

Co-advisor: Semantic Robot Vision Challenge Team (with J. Searock)

Co-advisor: Nanogram Robot Team (with S. Firebaugh)

Course Coordinator ES450, ES453, ES462

Maury Room Czar AY2008

WSE Student Outreach Committee 2001-present

WSE Curriculum Strategic Planning Committee 2009-present

Chair, Faculty Senate Library Subcommittee

Panel Reviewer for National Science Foundation proposals

Reviewer:

- IEEE Transactions on Robotics
- IEEE Transactions on Aerospace and Electronic Systems,
- ASEE Annual Conference and Exposition
- ASEE Computers in Education Journal
- ASEE Annual Conference and Exposition
- ASEE Computers in Education Journal

Presented a Workshop at the 2007 ASEE Annual Conference and Exposition - Curriculum Models, and Research Designs Workshop on Robotics Education

9. Principal publications of last five years:

- S. L. Firebaugh, J. A. Piepmeier, and C. D. McGray, "Soccer at the Microscale: Small Robots with Big Impact." *Robot Soccer*. IN-TECH 2010. p. 285-310.
- Piepmeier, J.A. , Firebaugh, S.L., "PWM Accuracy for Scratch Drive Actuators, " *3rd Annual Dynamic Systems and Control Conference*, September 13-15, 2010, Cambridge, Massachusetts.
- B. Bishop, J. Esposito, and J. Piemeier, "Moving Without Wheels: Educational Experiments in Robot Design and Locomotion." *Computers in Education Journal*, Vol.1 No.3 July-September 2010, p. 41-49.
- E.A. Leckie, S. Firebaugh, J. Piepmeier, J. Burkhardt, "Jigglebot: A Mobile Microrobot Using Vibration Energy", National Conference for Undergraduate Research, Missoula, MT, April 2010.
- Firebaugh S., Piepmeier J., Leckie E., Burkhardt J. "Jitterbot: A Mobile Millirobot Using Vibration Actuation." *Micromachines, Special Issue on Microrobots*. 2011; Vol. 2, No. 2. p. 295-305.
- S.L. Firebaugh and J.A. Piepmeier, "The RoboCup Nanogram League: An Opportunity for Project-Based Undergraduate Education in Microsystems." *IEEE Transactions on Education, Special Issue on Microelectronic Systems Education*. Vol. 51, No. 3, August 2008, p. 394-399.

10. Professional development activities in the last five years:

- Special Interest Group on Computer Science Education (SIGCSE): ROS for Educators: Teaching with the Robot Operating System and Microsoft Kinect Workshop, 2012
- Dynamic Systems and Control Conference, 2010
- Connecticut Microelectronics and Optoelectronics Symposium
- Sabbatical, Spring 2008
- System Engineering Capstone Conference United States Military Academy 2009
- ASEE Annual Conference 2007, 2008, 2009
- Robocup 2007
- AAAI Spring Symposium: Accessible Hands-on Artificial Intelligence and Robotics Education 2007
- IEEE Southeastern Symposium on Systems Theory