

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

Date: 1 March, 2012

1. Name

Michael A. Hurni, CDR, USN, Ph.D.

2. Education

BS	Electrical Engineering	University of New Hampshire	1989
MS	Mechanical Engineering	Naval Postgraduate School	1997
Ph.D.	Mechanical Engineering	Naval Postgraduate School	2009

3. Academic experience

USNA, Master Instructor, 2001-2003, full time.
USNA, Assistant Professor/PMP, 2009-present, full time.

4. Non-academic experience

US Navy, USS South Carolina (CGN-37), Gunnery Officer, Ordnance Officer, Electrical Division Officer, 1992-1994, full time.
US Navy, USS Nicholas (FFG-47), Combat Systems Officer, 1997-1999, full time.
US Navy, USS Theodore Roosevelt (CVN-71), Reactor Electrical Assistant, 1999-2001, full time.
US Navy, USS Samuel B Roberts (FFG-58), Executive Officer, 2003-2005, full time.
US Navy, OIC of Surface Nuclear Propulsion Mobile Training Team, 2005-2006, full time.

5. Certifications or professional registrations

6. Current membership in professional organizations

7. Honors and awards

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

YP INSURV inspection coordinator (2001-2003)
Radiation Safety Officer (RSO) (2001-2003)
Faculty Senate Executive Committee and Secretary (2010-2011)
Faculty Senate Division Representative (2010-present)
Naval Academy Duty Officer (NADO) (2009-present)
Casualty Assistance Calls Officer (CACO) (2011-present)
MGSP Advisor (2010-2011)
Military Faculty Teaching Award Selection Committee (2011-present)
Personnel Committee (2011-present)

9. Briefly list the most important publications and presentations from the past five years

M.A. Hurni, P. Sekhavat, and I.M. Ross, "Autonomous Trajectory Planning Using Real-Time Information Updates," *Proceedings of the AIAA Guidance, Navigation and Control Conference and Exhibit*, Honolulu, 2008.

M.A. Hurni, P. Sekhavat, and I.M. Ross, "Pseudospectral Optimal Control Algorithm for Real-Time Trajectory Planning," *Proceedings of the 19th AAS/AIAA Space Flight Mechanics Meeting*, Savannah, Georgia, 2009.

M.A. Hurni, P. Sekhavat, and I.M. Ross, "Issues on UGV Optimal Motion Planning and Obstacle

Avoidance,” *Proceedings of the AIAA Unmanned... Unlimited Conference and Exhibit*, Seattle, Washington, 6-9 April 2009.

M.A. Hurni, P. Sekhavat, and I.M. Ross, “Autonomous Multi-Rover Trajectory Planning Using Optimal Control Techniques,” *Proceedings of the 2009 AAS/AIAA Astrodynamics Specialist Conference*, Pittsburgh, PA., 9-13 August 2009.

M.A. Hurni, P. Sekhavat, M. Karpenko, and I.M. Ross, “A Pseudospectral Optimal Motion Planner for Autonomous Unmanned Vehicles,” *Proceedings of the 2010 American Control Conference*, Baltimore, MD., 30 June – 2 July 2010.

M.A. Hurni, P. Sekhavat, M. Karpenko, and I.M. Ross, “Autonomous Multi-Vehicle Formations Using A Pseudospectral Optimal Control Framework,” *Proceedings of the 2010 IEEE/ASME AIM Conference*, Montreal, Canada, 6-9 July 2010.

M.A. Hurni, P. Sekhavat, and I.M. Ross, “An Info-Centric Trajectory Planner for Unmanned Ground Vehicles,” *Dynamics of Information Systems: Theory and Applications*, Chapter 11, Springer Publishing, 2010.

10. Briefly list the most recent professional development activities

Completed Ph.D. in Mechanical Engineering.

Attended AIAA GNC Conference and Exhibit, Honolulu, August, 2008.

Attended First International conference on the Dynamics of Information Systems, Gainesville, Florida, January, 2009.

Attended 19th AAS/AIAA Space Flight Mechanics Meeting, Savannah, Georgia, February, 2009.

Attended AIAA Unmanned... Unlimited Conference and Exhibit, Seattle, Washington, 6-9 April 2009.

Attended ACC Conference in Baltimore, MD. July 2010.