

JAY D. BERNHEISEL – FACULTY VITA

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EDUCATION

Ph.D. in Mechanical Engineering, Northwestern University, Evanston, IL 2006
Thesis Title: *Stable Transport of Assemblies*
M.S. in Mechanical Engineering, Rose-Hulman Institute of Technology,
Terre Haute, IN 2004
Thesis Title: *Dmodelling NACA Submerged Inlet Performance*
B.S. in Mechanical Engineering, Rose-Hulman Institute of Technology,
Terre Haute, IN 1997
German Technical Translator's Certificate, Rose-Hulman Institute of Technology,
Terre Haute, IN 2003

ACADEMIC EXPERIENCE

Associate. Prof. of Engineering, Union University, Jackson, TN, 2010-current
Assist. Prof. of Engineering, Union University, Jackson, TN, 2006-2010
Engineering Textbook Reviewer, Oxford University Press 2006-current
Research Assistant, Northwestern University, Evanston, IL 2001-2006
Adjunct Faculty (part time), Chapman University, Edwards Air Force Base, CA 2000-2001

NON-ACADEMIC EXPERIENCE

Stress Analysis Engineer, Corporate AeroGroup, Little Rock, AR 2009-current
Engineer, Cobotics, Evanston, IL Summer 2001
Flight Test Engineer, 418th Flight Test Squadron, Edwards Air Force Base, CA 1999-2001
Aircraft Maintenance Officer, 436th Logistics Group, Dover Air Force Base, DE 1996-1999

CERTIFICATIONS

Professional Engineer, Tennessee 2007

PROFESSIONAL SOCIETY MEMBERSHIPS

American Society of Engineering Education (ASEE)
American Society of Mechanical Engineers (ASME)
Institute of Electrical and Electronics Engineers (IEEE)

HONORS & AWARDS

Teaching and Learning Grant
Newell Innovative Teaching Award
IGERT Fellowship
Cabell Fellowship
Robert M. Steinhauser Award
Air Force ROTC Type I Scholarship
Steuben Society Scholarship

SERVICE ACTIVITIES

ABET Review Preparation, Union University, Jackson TN
Committee Member, Information Technology Committee, Union University, Jackson, TN
Committee Member, Gateway Course Development Committee, Union University,
Jackson, TN

Committee Member, Committee on Committees, Union University, Jackson, TN

PUBLICATIONS & PRESENTATIONS

1. J. D. Bernheisel, C. B. Mitchell, J. Gruenke. Living with Someone Else's Liver. Panel discussion, Union University, November, 2010.
2. J. D. Bernheisel. Moral, Ethical, and Social Policy Considerations for Liver Transplantation and Two Alternatives for Patients with Primary Sclerosing Cholangitis. In *65th Annual Meeting of the American Scientific Affiliation*, Washington, DC, 2010
3. J. D. Bernheisel. Engineering and Faith. Presentation to University of Tulsa Mechanical Engineering Students, 2009.
4. J. D. Bernheisel. Engineering and Faith. Presentation to John Brown University Engineering Students, 2009.
5. J. D. Bernheisel. Open Solutions. Presentation at the Union University EGR Department Student Seminar, 2007.
6. J. D. Bernheisel, Kyle Hathcox, Walton Padelford. Renewable Energy and You, Society of Physics Students Panel Discussion, Union University, November 2006
7. J. D. Bernheisel and K. M. Lynch. Stable transport of assemblies by pushing. *IEEE Transactions on Robotics*, 22(4):740-750, August 2006.
8. J. D. Bernheisel and K. M. Lynch. Stable transport of assemblies: Pushing stacked parts. *IEEE Transactions on Automation Science and Engineering*, 1(2):163–168, 2004.
9. J. D. Bernheisel and K. M. Lynch. Stable pushing of assemblies. In *IEEE International Conference on Robotics and Automation*, Barcelona, Spain, 2005.
10. Todd D. Murphey, David Choi, Jay Bernheisel, and Kevin M. Lynch. Experiments in the use of stable limit sets for parts handling. In *International Conference on MEMS, NANO, and Smart Systems (ICMENS)*, pages 218–224, Banff, Alberta, Canada, 2004.
11. J. Bernheisel. Self-assembly using graph grammars. IGERT Brown Bag Lunch series presentation, 2004.
12. J. Bernheisel. Toward parallel manipulation of many parts. Presentation at a meeting of the Laboratory for Intelligent Mechanical Systems, 2004.
13. J. Bernheisel and K. Lynch. Stable transport of assemblies: Pushing stacked parts. In *IEEE/RSJ International Conference on Intelligent Robots and Systems*, Las Vegas, NV, 2003.
14. J. Bernheisel. Pushing stacked parts. Presentation at a meeting of the Laboratory for Intelligent Mechanical Systems, 2002.
15. J. Bernheisel. Aerial refueling and flight test. Presentation at a meeting of the Laboratory for Intelligent Mechanical Systems, 2001.
16. James A. Ford, Jay Bernheisel, and Thomas H. Hane. Development of the new airborne icing tanker. In *31st Symposium of the Society of Flight Test Engineers*, Turin, Italy 2000.

PROFESSIONAL DEVELOPEMENT:

Programmable Logic Controllers Short Course	2009
Experimental Aircraft Association Workshop on Composite Construction	2008
ABET Faculty Workshop on Assessing Program Outcomes	2007
Fresh Start	2006
Union University program for new faculty	