

DAVID J. GIBLIN

AREA OF INTEREST: Mechanical Engineering Design

Visiting Assistant Professor
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EDUCATION

- 05/2007 **PhD. Mechanical Engineering**, Design Concentration
University of Connecticut, Storrs
- 05/2002 **B.S.E. Mechanical Engineering**, Cum Laude
University of Connecticut, Storrs

PROFESSIONAL LICENSE

- 11/2002 **Engineer-in-Training License**
Connecticut Department of Consumer Protection, Hartford, CT

HONORS/AWARDS

- 06/2002 **NSF Fellowship (3 Years)**, Da Vinci Ambassadors in the Classroom – The Galileo Project; University of Connecticut, Storrs
- 11/2001 **Pi Tau Sigma**, Connecticut Pi Psi
University of Connecticut, Storrs
- 12/2001 **Tau Beta Pi**, Beta of Connecticut
University of Connecticut, Storrs
- 04/2002 **New England Scholar**
University of Connecticut, Storrs
- 04/2002 **First Place Award**, Old Guard Presentation, ASME Hartford Student Section;
University of Connecticut, Storrs
- 11/1999 **Golden Key International Honour Society**
Central Connecticut State University, New Britain, CT
- 06/1998 **Competitive Edge Scholarship**, Wal-Mart;
Central Connecticut State University, New Britain, CT
- 10/1997 **Eagle Scout**, Boy Scouts of America, Troop 9;
Immanuel Lutheran Church, Bristol, CT

PROFESSIONAL MEMBERSHIPS

ASME - Student Member ♦ ASEE - Student Member ♦ NESAS - Life Member

PUBLICATIONS

1. GIBLIN, D., ZONGLIANG, M., GAN, Z., and KAZEROUNIAN, K., 2007. "Target Tracking Manipulation Theories for Combined Force and Position Control in Open and Closed Loop Manipulators." *Journal of Mechanical Design*, 2007. **129**(3).
2. GIBLIN, D., LIU, Y., and KAZEROUNIAN, K., 2006. "Target Tracking Robotic Manipulation Theories Applied to Force/Position Control in Peg-in-Hole Assembly Tasks." *International Journal of Robotics and Automation*. [Accepted for Publication]
3. GIBLIN, D. and KAZEROUNIAN, K.. 2006. "Controlling Robotic Contact Tasks with Geometric Inaccuracies and Random Workpiece Movements." *Journal of Intelligent and Robotic Systems*. [Submitted for Publication].
4. GIBLIN, D. and KAZEROUNIAN, K.. 2006. "Updating Workpiece Geometry Using Robotic Sensor Information Gathered During Contact Tasks." *Engineering with Computers*. [Submitted for Publication].
5. KOEHLER, C., FARACLAS, E., GIBLIN, D., KAZEROUNIAN, K., and MOSS, D., 2006. "A State by State Analysis of Engineering Content in State Science Frameworks: Toward the Goal of Universal Technical Literacy." *Journal of Engineering Education*. [Submitted].
6. GIBLIN, D., ZONGLIANG, M., GAN, Z., and KAZEROUNIAN, K., 2005. "Hybrid Target Tracking Manipulation Theories for Combined Force and Position Control in Open and Closed Loop Manipulators." *Proceedings of 2005 ASME International Design Engineering Technical Conferences*. Sept. 24-28, 2005, Long Beach, CA, Paper No. DETC2005-84349.
7. KOEHLER, C., FARACLAS, E., GIBLIN, D., KAZEROUNIAN, K., and MOSS, D., 2006. "Are Concepts of Technical and Engineering Literacy Included in State Curriculum Standards? A Regional Overview of the Nexus Between Technical and Engineering Literacy and State Science Frameworks." *Proceedings of 2006 ASEE Annual Conference and Exposition*. June 18-21, Chicago, IL, Paper No. ASEE2006-1510.
8. GIBLIN, David J.. *The Interaction of Force and Geometry in Robotic Manipulation*, Doctoral dissertation, University of Connecticut, Storrs, CT, 2007.
9. SUN, Y., GIBLIN, D., and KAZEROUNIAN, K.. 2007. "Accurate Robotic Belt Grinding of Workpieces with Complex Geometries." *Robotics and Computer-Integrated Manufacturing Journal*. [Submitted].

TEACHING EXPERIENCE

Summer 07	Curriculum Advisor , Senior Exploration Program, Yale, New Haven, CT
Summer 06	Instructor , Introduction to Mechanical Engineering, Senior Exploration Program, Yale, New Haven, CT
Summer 06	Instructor , College Physics, Bridge, Engineering Diversity Program University of Connecticut, Storrs, CT
05/02-12/05	Engineering Ambassador , High school science, math, and technology classes, Galileo Project, University of Connecticut, Storrs, CT
Summer 05	Instructor , College Physics, Bridge, Engineering Diversity Program University of Connecticut, Storrs, CT

- Summer 04 **Instructor**, College Physics, Bridge, Engineering Diversity Program
University of Connecticut, Storrs, CT
- 09/99-05/00 **Math Tutor**, Department of Mathematics, Central Connecticut State University,
New Britain, CT

RESEARCH PRESENTATIONS

- 11/06 ”[Flight Dynamics of Sounding Rockets and Microgravity](#),” *NALI LaunchQuest 2007: Reaching for the Stars, Teacher Symposium and Workshop*, University of Connecticut, Storrs, CT
- 08/06 ”[Controlling Robotic Interaction with the Environment](#),” *Senior Exploration Speaker Series*, Yale, New Haven, CT
- 06/06 ”[Are Concepts of Technical and Engineering Literacy Included in State Curriculum Standards? A Regional Overview of the Nexus Between Technical and Engineering Literacy and State Science Frameworks.](#)” *2006 ASEE Annual Conference and Exposition*. Chicago, IL.
- 09/05 ”[Hybrid Target Tracking Manipulation Theories for Combined Force and Position Control in Open and Closed Loop Manipulators.](#)” *2005 ASME International Design Engineering Technical Conferences*. Long Beach, CA.

VOLUNTEER EXPERIENCE

- 04/06 **Moderator**, Northeastern Regional Science Bowl Competition
University of Connecticut, Storrs, CT
- 09/04-05/05 **Student Mentor**, Senior Project
Lyman Memorial High School, Lebanon, CT
- 01/04-12/04 **Vice President**, GAMES: Graduate Association of Mechanical Engineering Students, University of Connecticut, Storrs, CT
- 11/97-Present **Assistant Scoutmaster**, Boy Scouts of America, Troop 9;
Bristol Historical Society, Bristol, CT