

Education

2012 (anticipated)	University of Washington at Seattle Doctor of Philosophy, Mechanical Engineering
05/2006	University of Texas at Austin Master of Science, Mechanical Engineering
05/2004	University of Texas at Austin Bachelor of Science, Mechanical Engineering (High Honors)

Employment

Academic Positions

01/2009 to 09/2009	Design for Environment Laboratory, University of Washington at Seattle Graduate Research Assistant	Seattle, Washington
01/2005 to 06/2006	Center for Electromechanics, University of Texas at Austin Graduate Research Assistant	Austin, Texas
08/2004 to 12/2004	Mechanical Engineering, University of Texas at Austin Teaching Assistant	Austin, Texas
08/2003 to 12/2003	Mechanical Engineering, University of Texas at Austin Undergraduate Research Assistant	Austin, Texas

Industry Positions

08/2006 to 12/2008	Phantom Works, Boeing Company Mechanical Systems Analyst	Seattle, Washington
06/2004 to 08/2004	Engineering Sciences Center, Sandia National Laboratories Technical Student Intern	Albuquerque, New Mexico

Experience

Courses Taught and Instructor Ratings (Normalized out of 5.0)

Semester/ Quarter	Course					Institution
	Thermodynamics					
Fall 2004 (TA)	4.7					UT Austin
Fall 2004 (TA)	4.7					UT Austin

Significant Projects

- 2009 – UW DFEL & Boeing – QUWICK LCA Design Tool; Graduate Research Assistant
- 2008 – Boeing – Linear Free Piston Engine Auxiliary Power Unit; Principal Investigator
- 2006 – UT CEM & Office of Naval Research – Optimizing a System of Gas Turbine Engines and Generators for Marine Power Generation; Graduate Research Assistant (Master's Thesis)

Students Mentored

2009 – Eri Amasawa (Undergraduate Research Assistant)

Achievements

Awards

2004 – UT College of Engineering Graduate Fellowship
2004, 2003, 2002 – UT Honors Day, College Scholar
2003 – Steve K. Sin Endowed Presidential Scholarship
2003, 2002, 2001, 2000 – University Honors
2002 – Edward Morgan and Rebecca Brown Case Endowed Presidential Scholarship
2000 – El Paso Chapter of the Texas Society of Professional Engineers Scholarship

Societies

American Society of Engineering Education – ASEE (since 2008)
American Society of Mechanical Engineers – ASME (since 2008)
Tau Beta Pi (Engineering Honor Society) – Texas Alpha (since 2002)
Pi Tau Sigma (Mechanical Engineering Honor Society) – Texas Kappa (since 2002)

Credentials

Resident Status: United States Citizen
Security Clearance: United States Department of Energy Level L (inactive)
License: Engineer In Training (EIT) – Texas; 2006

Service

Ongoing – Habitat for Humanity of Seattle/South King County
2006 – Boeing Company Math and Science Afterschool Program
2004 – University of Texas at Austin External Advisory Committee Student Panel
2003 – Tau Beta Pi (Texas Alpha), Candidate Secretary and Service Chair
2003 – Pi Tau Sigma (Texas Kappa), SEC Representative

Conferences, Symposia, Workshops (Attended and/or Presented)

2008 – Boeing Company Fuel Cell Workshop (Everett, Washington)
Presented: Environmentally Sustainable System Design Guidelines
2008 – ASME Energy Sustainability Conference (Jacksonville, Florida)
2006 – SAE Power Systems Conference (New Orleans, Louisiana)
2005 – UTME Thermal/Fluid Systems Seminar (Austin, Texas)
Presented: Optimizing a System of Gas Turbine Engine-Generator Sets
2005 – ONR Electric Ship Research Consortium (Tallahassee, Florida)
Presented: Gas Turbine-Generator Set Optimization

Publications

Conferences/Symposia Proceedings

1. “Directly-Coupled Gas Turbine Permanent Magnet Generator Sets for Prime Power Generation On Board Electric Ships” by Vijlee, Ouroua, Domaschk, and Beno (IEEE Electric Ship Technologies Symposium, 2007)

Institution Documents

1. “Environmentally Sustainable System Design Guidelines” (Boeing Company; 2008)
2. “Optimizing a System of Gas Turbine Engines and Generators for Marine Power Generation” (UT Austin Master’s Thesis; 2006)
3. “An Automated Procedure for Analyzing the Effects of Vortex-Induced Fin Pressure on Roll Torque for a Finned Body of Revolution” (Sandia National Laboratories, SAND2004-4378; 2004)