
Experience

US Naval Sea Systems Command - PMS403 - Remote Minehunting Systems Washington DC / Philadelphia, PA
Lead Mechanical Systems Engineer September 2011 - Current

- Analyzed mechanical systems issues on Remote Multi-Mission Vehicle and provided recommendations that balanced cost, schedule, maintainability, and reliability as the program went through two reliability growth spirals in preparation for an Initial Test and Evaluation (IOT&E)
- Identified in excess of \$140M in cost savings related to tow cable consumption and maintenance and implemented verification testing prior to RMS baseline incorporation
- Participated in numerous Integrated Product Teams, including Systems Engineering, Operational Availability, Corrosion Prevention, and Obsolescence
- Co-authored two Small Business Innovated Research (SBIR) topics and an Office of Naval Research Technology Insertion Program for Savings (ONR TIPS) to develop high performance recovery aids and anti-corrosion coatings

Naval Surface Warfare Center Carderock Division - Ship Systems Engineering Station Philadelphia, PA
Mechanical Engineer August 2008 - September 2011

- Conducted reviews of shock test procedures, reports, and analyses to ensure compliance to MIL-S-901D requirements for surface and submarine classes
- Actively participated with program offices to develop a comprehensive, accurate shock test plan focused on minimizing cost and schedule risk while meeting shock requirements
- Participated in DDG-class new construction shock inspections to ensure ship and equipment survivability in hostile environments

Bristol-Myers Squibb Pennington, NJ
Information Systems Engineer April 2007 - September 2007

- Independently created a set of centralized tools used by over 70 sites for asset management centered around a database powered website for data review and decision making
- Lead user of Novell ZENworks Asset Management (ZAM), collecting IT asset data such as utilization, security posture, and application installations to support IT software team in patch development

Drexel Autonomous Systems Lab Philadelphia, PA
Researcher June 2004 - September 2007

- Mechanical Systems Engineer on the rapid development of a commercial ATV into a semi-autonomous, GPS waypoint guided platform for use in both manned and unmanned modes
- Participated in the development and prototyping of aerostat based surveillance and communications suite for rapid response
- Participated in controller design for Micro Air Vehicles (MAV) using computer vision for use in Indoor Aerial Robotics Competition

Drexel University Philadelphia, PA
Teaching Assistant March 2006 - September 2006

- Designed classroom material for third quarter freshmen involving elementary circuit design, instrumentation use, data collection, data processing, and data presentation
- Created new laboratory experiments and academic exercises relating lab experiments with real world applications
- Performed Science, Technology, Engineering, and Mathematics (STEM) outreach to local high school students

General Electric- Ceramic Composites Division

Mechanical Engineer

Newark, DE

March 2005 - September 2005

- Assistant engineer for NASA Return to Flight related A-Basis database for Carbon Silicon Carbide ceramic composite material validation
 - Responsible for the continued development of over 3200 material testing samples, including manufacturing, quality, rework, and delivery
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Education

Drexel University

Master of Science, Mechanical Engineering (GPA: 3.33)

Philadelphia, PA

Anticipated June 2015

Drexel University

Bachelor of Science, Mechanical Engineering (GPA: 3.15)

Philadelphia, PA

June 2008

Skills

Equipment: Oscilloscope, Function Generator, Power Supplies

Acquisition: DAWIA SPRDE Level 1

Honors

- Drexel University Undergraduate Researcher of the Year 2006
- AJ Drexel Scholarship 2003-2008