
EDUCATION:

BS Mechanical Engineering: *GPA 3.40 / In-Major GPA 3.70*

May 2013

MS Mechanical Engineering: *GPA 4.0*

Anticipated Graduation – December 2013

– SAT: 1510 (*Math: 770, Reading: 740*)

– National Achievement Semi-Finalist, National Merit Commended Scholar, AP Scholar with Distinction

WORK EXPERIENCE:

Research Analyst Intern

Summer 2013

– Work with research analyst team to model and develop credit views for names primarily in the CLO portfolio.

Product Development/CAD Intern

Fall 2012 – Spring 2012

– Consulted with LINC LLC to develop a wheelchair securement system for public transportation. Primary focus: CAD and design studies.

Teaching Assistant, Numerical Methods

Fall 2012

– Assisted in teaching of coursework including Matlab and intro numerical methods.

Research & Development Mechanical Engineering Intern

Summer 2012

– Worked with senior engineers on a variety of projects including developing a precision mechanical gripper, developing assembly and part drawings, and developing thermal analysis methods for a micro-scale system.

Aspire REU/TIPeD Intern

Summer 2011

– Collaborated in a 5-member team of interns and professionals to develop a patent pending assistive technology in a Research for Undergraduates program sponsored by University

Resident Assistant

Fall 2010 – Spring 2012

– Developed leadership skills and communication skills undergraduates by working closely with campus leaders and staff.

PROJECTS:

Bus Securement System

Summer 2011, Fall 2012 – Spring 2012

– Investigated product requirements, safety standards, and researched user experience to motivate revised design. Used product and market research to write a SBIR-II grant proposal.

Space Robotics: Skylight Carriage System

Spring 2012

– Worked in an 8 person group to develop robotic solutions to problems confronted in the's Google Lunar X Prize mission.
– Developing deployment system for moon skylight exploration.

Design II: Epi-Card -- (*Winner of Best Senior Project*)

Spring 2012

– Worked in a 6 person group to develop a highly portable wallet-sized epinephrine injector.

Precision Mechanical Gripper:

Summer 2012

– Worked with senior engineers to develop a highly precise gripper apparatus, stage, and method for assembling micro camera assemblies.
– Created detailed CAD models and ASME-Y14.5 drawings for parts using Pro/Engineer.

Motorcycle Top Box: Thermal Fluids

Spring 2012

– Worked in a 5 person team to research and design a cooling insert for a motorcycle top box.
– Created detailed CAD models and engineering drawings of cooling insert; performed FEA thermal and fluid flow analysis of system.

PPG Dissolution Rate System: Engineering Design Projects

Spring 2012

– Worked in 5 person team to develop system for quantifying relative dissolution rates of calcium hypochlorite in water for PPG industries.
– Acted as Project Lead; used formal work management processes to manage work flow.

SKILLS & PROFICIENCIES:

Microsoft Excel/Word

Solidworks Pro 2012

Pro/Engineer WF 5.0

Matlab

Mathcad

Java, HTML

ANSYS v12.0

Adobe Creative Suite

HOBBIES & ACTIVITIES:

Sigma Chi Fraternity (*Founding Father, Standards Chair, Derby Daddy, Risk Man*)

Fall 2010 – Present

Harlequins Rugby 15s, 7s (*2011 National Qualifier*)

Spring 2011 – Present

Rugby Club

Fall 2009 – Present