Max Altshuld **Max.Altshuld@gmail.com**

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Objective

My objective is to utilize my creativity and problem-solving skills as a mechanical engineer, working independently or in a team environment

Education

Santa Clara University, Santa Clara, CA:
Masters of Science in Mech. Eng.: Space Systems Engineering (Expected July 2013) GPA: 3.926

Bachelors of Science in Mech. Eng., June 2010

Relevant Course Work: Material & Manufacturing Processes, Machine Design, Dynamics/Vibrations, Thermodynamics, Thermal Design, Fluid Dynamics, Strength & Materials, Heat Transfer, Intro to Aerospace Engineering, Composite Materials, Linear Control Systems, Adaptive Control, Mechatronics, Space Systems Design/Engineering, Robotics, Propulsion Systems, Intro to Systems Eng., Project Management Basics.

Skills

Computers: Microsoft Excel, Word, Power Point, Project, Pro E, AutoCAD, Solid Works, Abaqus, C programming language, Matlab, Latex, Labview, STK
Machine Shop: Experience milling, lathing, and a solid understanding of other fundamental machine shop skills
Additional: Detail-oriented, problem solver, leadership experience, able to work individually and on a team

Projects

Senior Design Project: Participated in the University Nanosatellite Program (UNP-6), sponsored in part by the Air Force Research Laboratory (AFRL), as the lead engineer for the structure and imaging subsystems for SCU's nanosatellite, Intelligent Responsive Imaging Spacecraft (IRIS). The responsibilities included the design of the primary and secondary structures on board the satellites and an implementation of worst-case load scenarios in a full static and dynamic structural analysis, as well as the design of a protective container for the imaging subsystem. Included in the project was a critical design review, which included industry members and AFRL personnel who evaluated the project management methods and the satellite design.

System Engineering Project: Studied and implemented the systems engineering practices utilized in satellite design through an independent study, specifically to gain experience in systems design, integration and project management. As the lead systems engineer for IRIS my responsibilities included managing the system and subsystem requirements and verifying their completion, supervising resource distribution, and managing system level documentation and verification. Other tasks included organizing team meetings, managing systems budgets (e.g., mass, volume, link, power, etc.), and facilitating interactions between various subsystems.

Junior Design Project: Leader of my design projects group, the project entailed designing and building a fully functional controlled vehicle that can collect and place rocks on a designated target, designed to mimic a Mars rover.

Experience

Interorbital Systems, Mojave, CA **June, 2011 - August, 2011**
Intern: Spacecraft Technician

- Designed, prototyped, and tested a CubeSat ejection system for use with Interorbital Systems Neptune 30 rocket system. This involved machining parts, integrating COTS components, and reevaluating the design after testing
- Prototyped and tested the main components for the rocket recovery system. This involved machining components, integrating electrical components and wiring, and testing the nosecone release system
- Machined and installed outriggers for the rocket launch system and built a CubeSat mockup for tests

Robotic Systems Laboratory, Santa Clara, CA **July, 2010 - December, 2010**
Intern: Systems Engineer

- Lead systems engineer in charge of SCU's nanosatellite project: IRIS
- Responsibilities: Coordinating system and subsystem designs and analysis for a nanosatellite, as well as managing resources and systems budgets, and supervising documentation and requirements verification

de Saisset Museum, Santa Clara, CA **October, 2008 - October, 2009**
Art Guard

- Guarded the exhibits in the on-campus museum, as well as provided informational assistance to visitors

Activities

Interests: Traveling, guitar, reading, math, physics, hiking, robotics, snowboarding, cooking, and satellites
Group Leader: Aerospace Innovation Project, Santa Clara University 2010