Jared Leidich Jared@Leidich.com

## Overview

I am currently an Aerospace Engineer at Paragon Space Development Corporation in Tucson, AZ looking for challenging opportunities at small research and development focused companies.

## Work Experience

**Paragon Space Development Corporation** **August 2009 to Present**
*Aerospace Engineer* *Tucson, AZ*

- Currently serving as testing lead under Lockheed Martin and NASA JSC designing test environments for and testing human-rated parts scheduled to launch to deep space and reenter the atmosphere in February 2013
- Served as lead engineer for the development of a small reentry vehicle payload canister under NASA ARC
- Wrote several winning Small Business Innovative Research (SBIR) grants
- Served as lead designer for and significantly contributed to the writing of winning $1.7 million Commercial Crew Development (CCDev) grant proposal which was recently recognized at the White House during the fiscal year 2011 budget release by NASA administrator Bolden
- Authored over 10 papers published with ICES, AIAA Space 2010, 2011 and TFAWS
- Sitting on the Life Support Sciences and Systems Technical Committee for the American Institute of Aeronautics and Astronautics

**Laboratory for Atmospheric and Space Physics (LASP)** **December 2008 to June 2009**
*Research Assistant* *Boulder, CO*

- Served as lead engineer for the redesign of CRIA (Cosmic dust Reflectron for Isotopic Analysis) for testing
- Conducted major instrument modifications to improve performance, increase ease of assembly, and prepare for potential lunar flight build; instrument was found to be successful in testing at the Heidelberg dust accelerator

**NASA RFLUSH Wastewater Precipitate Filter Project** **Fall 2007 to May 2009**
*Designer, Analyst* *Boulder, CO/Houston, TX*

- Designed and built novel inclined clinostat to simulate reduced gravity particle motion
- Created concept models for a wastewater precipitate filter for potential use at the prospective Lunar Outpost
- Competed for and was awarded 2 microgravity flights at NASA JSC through the Systems Engineering Flight Program
- Created with NASA scientist Dr. Evan Thomas a clinostat design under consideration for patent by NASA JSC and awarded pending tech brief publication
- Authored 2 papers published at ICES 2009

**Drag and Atmospheric Neutral Density Explorer (DANDE) Project** **Fall 2007 to January 2009**
*Separations Team Lead / Designer / Analyst / Machinist* *Boulder, CO*

- Designed, analyzed and built over 10 components scheduled for launch to Low Earth Orbit in June 2012 as part of the first commercial payload planned to fly through the Commercial Orbital Transportation Systems (COTS) program
- Served as Separations Team Lead through the development of a novel kinematic mounting and release system
- Participated as core team member on winning Nanosat V competition (greater than $220K AFRL grant funding, $200K additional funding from NASA, COSGC and industry partners and award of launch worth several million dollars)

*Other Work Experience*

**Columbine Hills Concrete** **Summer 2007, 2008**
*Project Manager* *Silverthorne, CO*

- Served as project manager of CDOT US6 roadway expansion/safety improvements 2007 and FAA Granby/Grand County Airport rebuild 2008
- Scheduling of as many as 30 employees among up to 4 subcontractors working at a time
- Budget management of over $1M dollars per month

**Engineers Without Borders USA** **Fall 2006 to present**
*Project Engineer / Project Manager* *Boulder, CO, Rwanda*

- Managed the implementation of 18 institutionally sized high efficiency cook stoves in rural Rwanda
- Aided in the design of a new iteration of rocket stove adapted for use in Rwanda with locally available pumas stone
- Design manuals for local installation of rainwater catchment and UV systems in sub-Saharan Africa

*Early Internships*

- Lockheed Martin Space Systems Co., student intern for the Orbital Space Plane 2003 - 2004
- Coors Brewery research and development laboratory, student intern 2003 - 2004
- Boeing Space Systems Company, senior design for the expandable ball rover (Mars and Lunar exploration) 2008 - 2009

## Education

**University of Colorado at Boulder** **Graduated May 2009**
*BS Mechanical Engineering* *Boulder, CO*

- Successfully completed the NASA Spacegrant fellowship through the Colorado Spacegrant Consortium (COSGC)
- Passed the Fundamentals of Engineering (FE) exam 2007, scheduled to take the PE exam in California April, 2012
- Winner 2009 CU Mechanical Engineering design expo
- Judges pick 2005 CU Boulder design expo
- Teaching assistant and lab director for Computer Aided Drawing and Fabrication sophomore design course 2005, 2006

**University of Arizona** **Spring Semester 2011**
*Graduate Level Coursework* *Tucson, AZ*

- Advanced Thermodynamics and Advanced Engineering Analysis (Vector Calculus)

## Other Interests

- World travel to over 70 countries
- Outdoor sports including climbing 22 of Colorado's 14,000 ft. peaks and alpine skiing in Colorado's backcountry
- Playing piano for over 20 years with 2 classical albums (www.JaredLeidich.com/music)