Emily L. Judd

Objective

Gain practical engineering experience through research or an internship in Aerospace Engineering, especially in space applications. Continue engineering education with the intent to pursue a Ph.D. in Aerospace Engineering.

Education

University of Central Florida (UCF), Burnett Honors College Student **August 2011-May 2016 expected**

Pursuing a B.S. in Aerospace Engineering and a B.M. in Music Performance on horn. **3.8/4.0** GPA.

Awards and Publications

UCF Order of Pegasus Finalist, National Merit Scholar, First Year Scholar, President's Honor Roll, and Dean's List.

Gordon, A. P., Judd, E., Bouchenot, T., and Penmetsa, R. C. (2015) "A Microstructurally-Informed, Continuum-Level Life Prediction Model for Thermo-Acousto-Mechanically Fatigued Ti-6242S and IN617" AIAA SciTech 2015, January 5th-9th, Kissimmee, FL.

Engineering Experience

Iowa State University Wind Energy Science, Engineering, and Policy REU **June 2015-August 2015**

- Worked in the Wind Energy Manufacturing Lab. Tested the effects of a new automated deformation technique (shifting) on fiberglass. Designed an experiment, created samples, collected data, and processed results.
- Presented: "The Mesostructural Effects of Shifting on Fiber Reinforced Polymers in Wind Turbine Blade Manufacturing," technical research paper, technical poster, technical poster for group policy project, group video project.

UCF Mechanics of Materials Research Group, Undergraduate Design Assistant **April 2014-present**

- Worked to understand effects of applied, thermal, and acoustical forces on a metal sample to simulate flight conditions at supersonic speeds. Analyzed test data and reviewed literature for comparisons. Worked on mathematical modeling of data.

Students for the Exploration and Development of Space (SEDS), UCF Officer **September 2011-present**

- NASA Student Launch Mini-MAV competition team member (Sept. 2014-Apr. 2015). SEDS national 10K rocket competition team member (Apr.-Sept. 2014). **Third place** nationally. Florida Space Grant Consortium maximum altitude mini-hybrid rocket competition team member. **First place** in regional college division (Apr. 2013).
- Elected Treasurer (Mar. 2013-Mar. 2015). Elected Director of External Affairs (Mar. 2015-present).

Space Studies Institute, Spring Break Intern **March 6-9, 2015**

- Catalogued aerospace data and papers into a research database. Sorted based on topic and relevance.

Skills

Experienced in Matlab and Mathcad; intermediate skills in ImageJ, RockSim, and LabVIEW; learning Simulink and Eureqa.

Memberships

Students for the Exploration and Development of Space (SEDS), Society of Women Engineers (SWE), Tau Beta Pi Engineering Honor Society, The National Society of Leadership and Success (Sigma Alpha Pi), Pi Kappa Lambda (Music Honor Society).