

Eric S. Baumgarten

Education	California Polytechnic State University San Luis Obispo MS,BS Mechanical Engineering June 2015
Email	eric.s.baumgarten@gmail.com
Website	ericbaumgarten.com
Work Experience	<p>Mechanical Engineer: Jet Propulsion Lab (JPL), Pasadena, CA 2015-Present</p> <ul style="list-style-type: none">• Developed configuration, mass budget, cost and schedule for air and spaceborne instrument proposals• Designed and manufactured ground support equipment and assembly tooling• Produced engineering part and assembly drawings with use of GD&T• Created detailed assembly procedures for flight hardware <p>Mechanical Engineer: PolySat, San Luis Obispo, CA Summer 2014</p> <ul style="list-style-type: none">• Designed and tested 3D printed antenna constraint and release mechanism• Aided in the manufacture and construction of new satellite ground station• Performed analysis on IPEX Cubesat telemetry• Performed duties as PolySat research lab manager <p>Solar Array Intern: SSL, Palo Alto, CA Summer 2013</p> <ul style="list-style-type: none">• Worked on solar arrays for commercial geosynchronous satellites• Created detailed engineering drawings for tooling and testing assemblies• Redesigned test fixture to increase accuracy and automation• Wrote test procedures for environmental testing
Engineering Activities	<p>PolySat, San Luis Obispo, CA 2012-2015</p> <ul style="list-style-type: none">• PolySat Lab Manager (June 2014-June 2015)<ul style="list-style-type: none">– Managed Cubesat design lab consisting of around 60 multidisciplinary graduate and undergraduate students– Provided outreach and education on Cubesats– Wrote proposals to bring funding into the lab• PolySat Mechanical Lead (January 2014 - June 2014)<ul style="list-style-type: none">– Organized a team of 8 undergraduate mechanical engineers in designing, testing and assembling the ExoCube cubesat– Working specifically on the integration and testing of the Exocube cubesat• IPEX Cubesat Mechanical Lead (May 2012 - December 2014)<ul style="list-style-type: none">– Successfully Launched 12/6/13– Wrote procedures for and performed environmental testing on CubeSat– Wrote documentation to ensure CubeSat compliance with Launch provider– Manage structure design and CAD
Honors	<p>Eagle Scout: Boy Scouts Of America 2009</p> <ul style="list-style-type: none">• Designed, built, and installed two 4' x 6' entrance signs for the Coppell Nature Park <p>NASA Group Achievement Award: IPEX CubeSat 2014</p>
Software Experience	<p>Very Proficient: Solidworks, NX, Pro Engineer, MATLAB, EES, \LaTeX, Adobe Photoshop, Adobe Illustrator, Microsoft Office</p> <p>Proficient: C++ , Fluent, ABAQUS, Eagle CAD</p>