

# Eric S. Baumgarten

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