# Spencer Davis - (650) 796-5880
## spencerbdavis87@gmail.com
## spengineer.net

US Citizen

## Skills:

**Software:** SolidWorks, AutoCAD, Thermal Desktop, Altium Designer, Slic3r, Mastercam, Vericut, COMSOL, Siemen's Teamcenter PLM, Git.
**Programming:** C, Objective-C, Java, Lua, PHP, HTML, CSS, Bootstrap, Matlab, LabVIEW, Processing, Arduino, AVR, G-code.

## Experience:

### Thermal Engineer – Space Systems Loral – Palo Alto, CA (2014 - Present)
Thermal engineer for NASA partnerships and proposals including ROSA (Roll Out Solar Array) and ARRM (Asteroid Redirect Robotic Mission). Collaborated on spacecraft and subsystem design reviews, thermal vacuum testing, FEA/FDA thermal simulations, modeling, and analysis using SINDA/FLUENT and Thermal Desktop. Made ITAR compliant launch vehicle thermal model for Eutelsat E65W spacecraft to provide communications infrastructure for the Rio 2016 Olympics.

### Lead Mechanical Engineer – ECOSat – BC, Canada (2013 - 2014)
Managed full-lifecycle 3U CubeSat mechanical design using SolidWorks. Won the Canadian Satellite Design Challenge, securing the CubeSat a launch to low Earth orbit. Manufactured Attitude Determination and Control System flight hardware. 4-layer surface mount PCB for ADCS designed using Altium Designer. Wrote several successful grant proposals.

### Nanoscale Materials Researcher – U. of Victoria – BC, Canada (2013)
Developed prototype analog wireless battery-less nanowire resistive sensors for renewable energy applications. Rapid prototyping of phase change material thermal test apparatus using SolidWorks and FEA using COMSOL.

### Mechanical Engineer – UVicAero – BC, Canada (2012 - 2013)
UAV systems prototyping with 3DRobotics Ardupilot Mega 2.0 using APM Autopilot Suite. Designed a 3D-printed pan and tilt gimbal used for antenna tracking of UAV in SolidWorks to latest GD&T.

### Executive U.S. Representative – Jialong Automatic – Qingdao, SD, China (2012)
Supported the installation of an automatic hot water heater outer-wrapper assembly line for General Electric's GeoSpring hybrid hot water heater products. Collaborated with rigging crews, electricians and engineers to complete the installation.

### iOS Developer – Entrepreneur – Palo Alto, CA & Seattle, WA (2010 - 2011)
Independently developed and designed a graphical task manager app for iOS 4 targets using Xcode. Instruments was used for monitoring CPU activity and memory leaks. On-device A/B testing and distribution using provisioning profiles.

## Education:

### Bachelor of Mechanical Engineering, Advanced Materials Specialization (2015)
University of Victoria, British Columbia, Canada