

# Alan Phan

www.alanphan.me

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EDUCATION	<b>Bachelor of Science (B.S.), Mechanical Engineering</b> <i>Portland State University</i> Courses: Finite Element Analysis, Prototype Development, Solar Engineering, Measurements & Instruments, Thermo-Fluid Mechanics	June 2014 Portland, OR
SKILLS	ABAQUS • MathCad • AutoCAD • SolidWorks • LabVIEW • MATLAB Microsoft Office • R • LaTeX • Arduino • Revit • HTML5 • CSS	
CERTIFICATIONS	Fundamentals of Engineering (EIT) – Oregon	November 2014
EXPERIENCE	<b>Mechanical Designer</b> <i>Hot Rod Conspiracy, LLC</i> Redesign of a Victory 106 engine to create a custom motorcycle cylinder head based on customer product specifications <ul style="list-style-type: none"><li>• Produced full body SolidWorks model for CFD analysis</li><li>• Performed FEA and heat transfer analysis of convective cooling fins</li><li>• Tested flow bench of exhaust and intake for performance optimization</li><li>• Managed weekly design meetings with advisor and sponsor</li></ul>	September 2013 – June 2014 Portland, OR
	<b>Safety Instructor &amp; Head Guard</b> <i>PSU Campus Recreation</i> Taught American Red Cross CPR/First Aid courses certifying Campus Recreation employees to be rescue ready, mentored guard groups, and led in-service review sessions	September 2010 – March 2014 Portland, OR
	<b>Volunteer</b> <i>Engineers Without Borders</i> Fundraised to implement mechanical design of water sanitation system for the Nicaragua International Project	January 2013 – June 2013 Portland, OR
PROJECTS	<b>Solar Engineering Innovation Project</b> Researched and presented on solar balloon PV-mechanical system including cost analysis of drivetrain components and operating system efficiency	May 2014 – June 2014
	<b>SAFER Barrier Design</b> Used finite element analysis to investigate the NASCAR barrier and conducted failure analysis explicit method to simulate dynamic impact	January 2014 – March 2014
	<b>PSU Design Competition</b> Designed a vibrational energy harvesting device successfully; tasked to collect and store energy to subsequently lift an object as high as possible	September 2013 – December 2013
ACTIVITIES & SOCIETIES	ASME • EWB • PSU Cycling • VSA • PSU Campus Recreation American Red Cross	