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## experience

09/13 - 06/14 Portland, OR

## Hot Rod Conspiracy, LLC | Mechanical Designer

Redesign of a Victory 106 engine to create a custom motorcycle cylinder head based on customer product specifications

- Produced full body SolidWorks model for CFD analysis
- Performed FEA and heat transfer analysis of convective cooling fins
- Tested flow bench of exhaust and intake for performance optimization with LabVIEW
- Managed and documented weekly design meetings with advisor and company owner

09/10 - 03/14 Portland, OR

## PSU Campus Rec | Safety Instructor & Head Guard

Taught American Red Cross CPR/First Aid courses certifying Campus Recreation employees to be rescue ready, mentored guard groups, and led in-service review sesssions

01/13 - 06/13 Portland, OR

## Engineers Without Borders | Student Volunteer

Fundraised to implement mechanical design of water sanitation system for the Nicaragua International Project

## projects

05/14 - 06/14

#### **Solar Engineering Innovation Project**

Researched and presented on solar balloon PV-mechanical system including cost analysis of drivetrain components and operating system efficiency

01/14 - 03/14

#### **SAFER Barrier Design**

Used finite element analysis to investigate the NASCAR barrier and conducted failure analysis explicit method to simulate dynamic impact

09/13 - 12/13

### **PSU Design Competition**

Designed a vibrational energy harvesting device tasked to collect and store energy to subsequently lift an object as high as possible

## education

June '14

## BS in Mechanical Engineering

Portland State University Portland, OR

ASME, EWB, American Red Cross

# certifications

November '14 Fundamentals of Engineering

## skills

Abaqus FEA AutoCAD SolidWorks Revit Inventor

LabVIEW
MATLAB
R
Arduino
HTML5 / CSS

Microsoft Office MathCAD LaTeX Adobe Creative