

Jeremy Louke

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Education

Bachelor of Science, Mechanical Engineering, *Portland State University*, Portland, OR 9/2013-6/2015

Maseeh School of Engineering GPA: 3.31

Mt. Hood Community College, Gresham, OR

9/2012-6/2013

Linn-Benton Community College, Albany OR

8/2009-7/2011

Skills

SolidWorks, GD&T, MATLAB, Python, R, Arduino(C,C++), Linux/Unix, MS Office (Excel, Word, PowerPoint, OneNote) Use of hand tools, soldering, machining, Controls design, Problem solver and planner, with a strong work ethic towards efficient collaborative multidisciplinary designs

Senior Project

Cold gas reaction control system, *Portland State Aerospace Society*, Portland State University

- Designed a 6-DOF active stabilization system for the PSAS LV-3 sounding rocket
- DeLaval Nozzles designed based on expected altitude, operating pressure and force requirements
- Controller design using LQR and state space to create efficient use of propellant during flight
- FEA analysis of custom machined high pressure manifold
- <http://www.instructables.com/id/Using-the-Intel-Edison-on-a-Cold-Gas-Reaction-Cont/>

School Experience

Student Designer, *Portland State Aerospace Society*, Portland State University 1/2014-Present

- Designing camera housings for Open Source high powered rocket in SolidWorks
- Rapid prototyping of designs using a 3D Printer
- Assist with other club member projects which includes soldering and placing electronic components on printed circuit boards

Underwater Camera Housing Designer, *Linn-Benton ROV Team* 9/2010-7/2011

- Lead designer for custom waterproof housings for COTS surveillance cameras, as well as signal processing and recording methods
- Worked with CS, ECE, CE, and ME majors to build an ROV that met challenges based around the BP Oil Spill
- Won 3rd place overall in 2011 MATE ROV competition at NASA Johnson Space Center. With a total of 54 national and international teams.

Work Experience

Manager, *Electronics Prototyping Lab*, Portland State University 4/2014-Present

- In charge of equipment safety during use
- Responsible for training students in the use of 3D printer, laser cutter, circuit router, solder reflow oven and soldering equipment
- Assist students with school related and personal electronics projects

Mech. Eng. Intern, *APDM*, Portland, OR 9/2014-3/2015

- Design Assembly jigs used for small batches of prototypes
- Work in an interdisciplinary group of engineers to design a product used for medical research

TTR coating operator, *Dynic USA Corporation*, Hillsboro, OR 7/2011-8/2012

- Measured and combined ingredients for use in the manufacturing of thermal transfer ribbon
- Operated and performed minor troubleshooting on thin film coating machine
- Underwent hazardous chemical, respirator, and forklift training

Fab Technician, *Intel Corporation*, Hillsboro, OR 7/2008-4/2009 and 5/2005-9/2005

Metal Injection Mold Operator, *Kinetics*, Wilsonville, OR

7/2007-4/2008

PCB Printing Technician, *Merix Corporation*, Forest Grove, OR

9/2006-3/2007