Charles Rymal

Objective

To secure a position where I can apply my skills in Mechanical Engineering and passion for solving difficult engineering problems.

Education

Master of Science in Mechanical Engineering

Oregon State University — Corvallis, Oregon
Start Date: April 2, 2012
Graduation Date: March 20, 2015 — GPA: 3.91

Bachelor of Science in Mechanical Engineering

Magna Cum Laude
Oregon State University — Corvallis, Oregon
Start Date: September 24, 2007
Graduation Date: March 23, 2012 — GPA: 3.78

Employment

Graduate Research Assistant — **September 2012 to September 2014**

Oregon State University - Corvallis, OR

- Title of research - Numerical Design of a High-Flux Microchannel Solar Receiver
- Worked with faculty and other students to design microchannel receivers for solar thermal power production
- Performed numerical simulations of heat transfer and fluid flow using commercial software: Ansys Fluent and StarCCM+
- Assessed pressure drop, thermal efficiency, structural integrity and flow distribution
- Published two conference papers for the ASME conference on Energy Sustainability

MECOP Intern — **March 2011 to September 2011**

Allied Systems Company - Sherwood, OR

- Managed several plant-wide manufacturing engineering projects with significant benefit for the company
- Designed various tooling, particularly welding fixtures, with consideration for ease of use and manufacturability
- Worked extensively with design engineers, manufacturing engineers, machinists, welders, and many others

MECOP Intern — **March 2010 to September 2010**

ATI Wah Chang - Albany, OR

- Designed material handling equipment for various applications
- Performed stress analysis calculations as well as FEA analysis on equipment designs
- Designed creative mechanical solutions to issues with existing machinery
- Worked with area operators, supervisors, mechanical engineers, and outside fabrication contractors

Technical Skills

applications	SolidWorks, AutoCAD Inventor, Ansys Fluent, StarCCM+, Microsoft Visual Studio, LabVIEW, Microsoft Office
systems	Microsoft Windows, Red Hat, Debian, Ubuntu
programming languages	C/C++, Python, MatLab, x86 assembly, Java, VBA, HTML, Javascript, PHP, SQL, TCL, make, CMake, bash