Risto Rushford

Portland, OR 97201

208-819-5997
cbr3@pdx.edu
www.linkedin.com/in/risto-rushford-060486

Master of Systems and Electrical Engineering student with heavy manufacturing experience, an aerospace internship and 3 years of project management for collegiate rocketry and cubesat projects. My career objective is to work on human-rated spacecraft.

EDUCATION

Portland State University:

M. Eng — Systems Engineering

September 2019 - Ongoing

An interdisciplinary approach to the development and operation of complex products, processes, and services. **GPA 3.81**

M. S — Electrical Engineering

September 2020 - Ongoing

Signal Processing & Machine Learning track with focus on applications to aerospace electronic systems. **GPA 3.74**

B.S. — Global Supply Chain Management

September 2016 -June 2019

Graduated Magna Cum Laude. Coursework focused on business analytics/forecasting, continuous improvement, and business operations/project management. **GPA: 3.85**

RELEVANT EXPERIENCE

Portland State Aerospace Society (PSAS) — *Project Mgmt Research Assistant*

January 2017 - PRESENT

Manage day-to-day technical and administrative project management activities including project team coordination, budgeting, scheduling, logistics planning. Accomplishments include over $50,000 raised in fundraising efforts.

Aurora Flight Sciences, Manassas, VA — *Supply Chain Intern*

June 2019 - August 2019

Assist buyers in tracking purchase orders. Attended continuous improvement meetings and led a kaizen initiative to improve receiving operations.

Gunderson Marine, Portland, OR — *Fitter/Welder*

April 2014 - April 2016

Perform final check of before hand-off to Quality Assurance. Worked start to finish on fitting and welding activities for two 578-foot long articulated oil barges, several flat-top cargo barges.

NOTABLE PROJECTS

Integrated Vehicle Health Management & Control System — *Systems Engineering Masters Project*

My masters project for 2020-2021 Academic Year is using the NASA Systems Engineering Engine to design, build and fly an Integrated Vehicle Health Management & Control System (IVHM-CS) for a suborbital, liquid propelled rocket.

Base 11 Space Challenge — *Liquid Propellant Rocket Competition*

In June 2019, I led my team to win 3rd place with $10k prize money in the Preliminary Design Phase. I also pioneered the team's use of the 3DExperience platform, prompting a surprise award of $5k from Dassault Systemes.

Oregon Satellite Project (OreSat) — *Oregon's First Satellite*

PSAS has two satellites in the OreSat project. I work with NASA CSLI and the rideshare providers to meet regulatory compliance and other documentation requirements.

SKILLSETS

Project Management

- NASA Systems Engineering Engine
- NASA Project Lifecycle Process Flow
- Interdisciplinary team management
- Lean Six Sigma
- SAP ERP
- Production planning/control
- Forecasting
- Root Cause Analysis
- Functional Analysis
- Trade Space Analysis
- Microsoft Project
- Excel
- Visual Studio

Technical Skills

- Dassault 3DExperience platform
- R, Python, MATLAB, C Programming languages
- Operations Research
- System Dynamics Modeling
- Agent-Based Modeling
- Business analytics
- Data Mining
- Machine Learning
- State-space modeling
- Signal processing