

Joe Runde

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Education

Carnegie Mellon University Pittsburgh, PA

- Master of Science, Machine Learning Department *Aug 2014 - May 2016*
- Coursework: Intermediate Statistics, Intro to Machine Learning, ML with Large Datasets, Statistical Machine Learning

Oregon State University Corvallis, OR

- BS - Computer Science, Magna Cum Laude *Sep 2011 - June 2014*
- Honor Roll - 7 Quarters, GPA - 3.85/4.0

Languages/Skills

Proficient in C++, Java, object oriented design

Experience with Matlab, Python, Javascript, PHP, HTML, SQL, Julia

Professional Experience

Software Engineer, Flir Systems

April - Sept 2013, June - Aug 2014

- Wrote new software and maintained existing software for tactical imaging and navigation systems
- Helped secure purchase orders by implementing legacy software on new products
- Successfully delivered concurrent projects and deadlines, with sole responsibility over high priority projects
- Learned importance of regression testing by catching product defects before release to global militaries

Technical Experience

Carnegie Mellon University, Statistics Education Research

September 2015 - Present

- Developing and collecting data from an online statistics course using edX which allows adaptive problem selection
- Developing adaptive problem selection algorithms to select the best tutoring strategy for each student
- Exploring skill-independent models for tutor intervention with low sample requirements, such as HMMs and latent factor models

Oregon State University, Senior Design Project

Sep 2013 - May 2014

- Worked with OSU chemistry lab to develop a mobile clinical biomarker test tool on iOS
- Product generates hierarchical regression models for colorimetric assays from video feed
- Glucose tests accurate to ± 5 mg/dl within 40 - 400 mg/dl range with 5 minute calibration
- Implications for use as an inexpensive, mobile diagnostic tool in countries with little medical infrastructure

Oregon State University, Starcraft AI Research

Jun 2012 - March 2013

- Developed the game interface for an adaptive agent that plays Starcraft
- Built a robust, polymorphic task system in C++ to accomplish in-game goals

Oregon Game Programming Challenge

March - April 2011

- Worked on a three man team for a first person zombie-survival game with a 30-minute campaign.
- Gained extensive experience with the IrrLicht engine, C++, and 3D graphics.

Awards/Activities

Bayesian Invasion Dodgeball Team

Winter 2015

OSU App Challenge Overall Winner

May 2014

Regular sax player at Calapooia Brewing open mic nights

Spring 2012

Best Teamwork Award, OGPC 4.0

April 2011