

## EDUCATION

**University of Washington**, Seattle, Washington

Currently enrolled

- MS candidate in Computational Linguistics.
- Expanding my machine learning knowledge to include Natural Language Processing techniques such as text classification, POS tagging, feature creation using deep linguistic structures, and word embeddings.

**Reed College**, Portland, Oregon

August 2008-May 2011

- B.A., Mathematics, GPA 3.48
- Senior thesis: *The Problem of Zarankiewicz* is a mathematical puzzle concerning the number of shared connections between two groups. Discovered and proved a new lower bound for certain cases of the problem.

## WORK

## EXPERIENCE

**Tura.io**, Portland, Oregon*Software Architect*

Sept 2017 to present

- Lead the design of a library for complex feature creation and event detection in real-time IoT data streams.
- Contributed to the development of a platform to store, manage, recall and re-evaluate the output from this library in a scalable cloud environment.
- Followed agile software developing practices and developed primarily in PYTHON and TENSORFLOW on UBUNTU and with DOCKER to containerize our platform.

**Intelligent Systems Division, NASA Ames Research Center**, California*Research Engineer, MORi Associates, Inc.*

Feb 2013 to Oct 2016

- Collaborated with the Data Sciences group to discover, explain, and predict safety and operational incidents in aviation using data mining and machine learning techniques.
- Designed novel anomaly detection algorithms to discover and investigate landings at four of the largest US airports. These algorithms improved upon the state of the art machine learning techniques and the results were published in IEEE DIGITAL AVIONICS SYSTEMS CONFERENCES and 2016 WORLD CONGRESS ON COMPUTATIONAL INTELLIGENCE.
- Tools utilized included PYTHON scientific stack (NUMPY, SCIPY, SCIKIT-LEARN) in a LINUX environment with GIT for version control and SHELL SCRIPTS for data management on our local network.

**Department of Biomedical Engineering,****Oregon Health and Science University**, Portland, Oregon*Research Assistant*

July 2011 to June 2012

- Collaborated with Dr. Todd Leen on perturbation methods for statistical analysis of neural modeling.
- These methods allowed us to approximate both online learning algorithms and electric pulses generated by fish with much higher confidence than before, leading to the publication of peer-reviewed journal articles.

References available upon request.