

Ryan Harper

Data Scientist

Skills

Algorithms and data structures (Big O), kernels, research method, research design, big data
Supervised/unsupervised models, neural networks (keras, sklearn), statistical analyses, preprocessing
Python (pandas, numpy, sklearn, nltk, regex, matplotlib), natural language processing, data engineering/visualization

Recent Projects

Exploratory Analysis Capstone: <https://kimrharper.github.io/port1.html>

An analysis of profits for blockbuster movies using required procedures for the scientific method to test and visualize samples.

Research Design Capstone: <https://kimrharper.github.io/port2.html>

Heart disease flag and classification using anonymized patient health indicators.

Supervised Capstone: <https://kimrharper.github.io/port3a.html>

Model-based predictions of students' first language based on his/her second language syntax structure.

Data Science Group Projects

Portland Data Science Meetup

Portland, Oregon

January-August 2018

- *PDOT Forecasting (Jun-Jul)*: Accomplished predictive polynomial linear regression model for 2016 fatal car accidents.
- *Portland Trimet Schedule (May-Jun)*: Accomplished data visualization of trends in trimet stop delays per route.
- *US Natural Disaster Patterns (Apr-May)*: Created geoplots of weather patterns to find natural disaster hotspots in the U.S.
- *Sector ETF Forecasting (Mar-Apr)*: Accomplished 2017 sector ETF forecasting using 2017 macroeconomic indicators.
- *Wikipedia Forum Sentiment Analysis (Jan-Apr)*: Accomplished automatic flagging of toxic comments in Wikipedia comments.

Education

PORTLAND STATE UNIVERSITY

MA, TESOL

June 2017

GPA: 3.89 / 4.0

- Core Topics: Syntax, Phonetics, Phonology, Cognitive Linguistics, Research and Design, Methods, Language Acquisition
- Specialized in curriculum assessment and curriculum design for ESL and EFL corporate/public institutions

THINKFUL

September 2018

Data Science Program

- Completed 5 Data Science capstones using statistical analyses, supervised/unsupervised learning, and the research method
- Mentored by a data science professional to understand industry standard practices and standards

PDX CODE GUILD

May 2018

Full Stack Program

- Trained in JS, Python (with PEP 8 standards), HTML, CSS, Django, and Github for group and individual projects
- Created full stack ESL blog themed website with PostgreSQL database for backend hosted by AWS