linkedin.com/in/kimryanharper github.com/kimrharper kimrharper.github.io

Ryan Harper

Data Scientist

Skills

Sorting algorithms and multiprocessing, big data, research method, research design,
data preprocessing, word vectorization, neural nets (keras, tensorflow), statistics,
Python (numpy, sklearn, statslab, nltk, re, matplotlib), natural language processing, data engineering/visualization

Data Science Projects

Thinkful Forecasting Capstone: kimrharper.github.io/project-bikeforecasting.html Regressive modeling of bike accidents in Portland, Oregon to create a baseline prediction model

Thinkful Exploratory Analysis Capstone: https://kimrharper.github.io/project-moviegenre.html

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

Thinkful Research Design Capstone: https://kimrharper.github.io/project-heartdisease.html Heart disease flag and classification using anonymized patient health indicators.

Thinkful NLP Capstone: https://kimrharper.github.io/project-lang8-1.html

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

Data Science Group Word2Vec Project: https://kimrharper.github.io/project-bgreview.html

Word2Vec Clustering Analysis of Board Game Reviews

Data Science Group Projects

Gap-CV Contributor

Portland, Oregon July 2018 - Present

- Developed notebook tutorial for pushing OCR data set into Keras NN with Gap-CV
- Weekly face-to-face meetings, unit test with pytest, and pull requests

Portland Data Science Meetup Contributor

Portland, Oregon Jul 2018 - Present

- Located rooms for weekly meetups (PSU Business Accelerator, PSU Library, Public Library, Code schools)
- Innovated, scraped, and cleaned OCR Chinese Historical Character data set for image analysis unit (est Nov 2018-Jan 2019)

Portland Data Science Meetup Participant

Portland, Oregon Jan 2018 - Present

- 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.

Work History

Office Assistant Spring 2017

International Special Programs, PSU, Portland, OR

- Created a curriculum for new elective course: Includes lesson plans and accompanying materials
- Coordinated between teachers, host family, program organizers and bus drivers to ensure events stay on schedule

English Language Trainer Mar 2013 - Jun 2017

GoFluent, Portland, OR

- Lead 90-minute workshops for business ESL on team management, persuasive conversation, and business presentations
- Structured grammar and pronunciation instruction for clients in Europe, South America, the Middle East, Africa and Asia
- Held diagnostic tests for new employees joining our clients

Graphic Design Intern 2012

PNW Tax School, Beaverton, OR

- Front-end graphic design for website (HTML and JS)
- Created weekly Tax School newsletter (including layout, content, and design
- Post production on 20 webcast/webinar videos for PDX Tax School

Junior High School English Teacher and Assistant English Teacher

2008-2011

Japanese Exchange and Teaching Program, Kamiichi, Toyama, Japan

- Designed and implemented English grammar lessons for 7th-9th grade students (around 15 classes per week)
- Led special sessions on cultural differences, American slang, American culture, etc.
- Prepared students for the annual Toyama Junior HIgh School Speech Competition

Elementary School Teacher

2008-2011

Kamiichi Town Hall and Board of Education, Kamiichi School District

- Designed and implemented engaging English lessons for 1st-6th grade students
- Created syllabi for the English courses at each of six different elementary schools in Kamiichi
- Frequent communication with 30+ native Elementary teachers and more than 800 students each year

Community English Teacher

2008-2011

Japanese Exchange and Teaching Program, Kamiichi, Toyama, Japan

- Coordinated two conversational (beginner and advanced) classes for ages 18-80
- Led special sessions on cultural differences, American slang, American culture, etc.
- Prepared students for the annual Toyama Junior HIgh School Speech Competition

Education

PORTLAND STATE UNIVERSITY

MA TESOL Sep 2015 - Jun 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 Apr 2018 - Oct 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 Nov 2017 - Feb 2018

Full Stack Program

- Coded 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

DEPAUW UNIVERSITY

BA East Asian Studies Aug 2004 - Jun 2008

GPA: 3.41 / 4.0

- Minor in Chinese and Communications
- Media Fellows Alum: Prestigious news/media/journalism program in the Midwest