Katherine Wood

Seattle, WA

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Skills

Languages	Python, R, JavaScript, HTML, CSS, SQL
Tools	Mechanical Turk, Presto, Jupyter Notebooks, RStudio
Statistics	Bootstrapping, model selection, null hypothesis significance testing, Bayesian hypothesis testing and model fitting, regression, machine learning

Experience

Insight Data Science
Seattle, WA

DATA SCIENCE FELLOW — January 2020 - present

- Developed an app with Streamlit and deployed on AWS to predict product recalls from consumer complaints.
- Extracted meaningful information from unstructured text with natural language processing to pair complaints with recall announcements using Python and NLTK.
- Used TF-IDF encoding and logistic regression with scikit-learn to classify consumer complaints that referred to a recalled product, achieving .73 AUC.

Facebook
Menlo Park, CA

CORE DATA SCIENCE INTERN — May 2018 - August 2018

- Mined and cleaned 5TB+ data sets with SQL and Presto to create in-depth analyses and visualizations.
- Trained and validated gradient-boosted decision tree models to predict future user behavior.
- Established a pipeline to collect, clean, and organize daily incoming data using Hive and Spark.
- Deployed a survey of 5,000 users to inform product decisions.
- Communicated results and insights to product teams and stakeholders.

Association for Psychological Science
Freelance

PROGRAMMER AND STATISTICIAN — 2016 - 2018

- Conducted meta-analysis and meta-regression in R for two collaborative international replication efforts.
- Programmed a cross-platform experiment in Python with Psychopy to administer a behavioral experiment to over 2000 participants.
- Created publication-ready data visualizations summarizing thousands of individual data points.

University of Illinois at Urbana-Champaign
Champaign, IL

GRADUATE RESEARCHER — 2011 - 2015

- Ran large-scale online experiments with Mechanical Turk using boto3, Javascript, HTML, and CSS, leading to 5 peer-reviewed publications and 2 conference presentations.
- Built laboratory-based behavioral experiments with Python, leading to a further 2 peer-reviewed publications and 1 conference presentation.
- Analyzed behavioral data in R using Frequentist, Bayesian, and non-parametric methods.
- Developed an open-source Python application that recovers raw data distributions from summary statistics using systems of Diophantine equations. (http://bit.ly/CORVIDS)
- Built an automated Mechanical Turk pipeline for a study on trauma and recovery using boto3, TurkGate, and Qualtrics for the Kinesiology Department.

TEACHING ASSISSTANT — Fall 2016

- Led discussion and laboratory sections for 30 students enrolled in Introduction to Experimental Psychology.
- Designed lectures and lab activities to teach fundamental concepts.

Education

University of Illinois at Urbana-Champaign

PHD IN PSYCHOLOGY — 2015 - 2020

M.S. IN PSYCHOLOGY — 2015 - 2017

UC Berkeley

B.A. IN PSYCHOLOGY — 2011 - 2015