

Onyi Lam

Social Scientist and Data Scientist

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Education

PhD Economics, UC San Diego, USA

2012-Apr 2017

MPP Public Policy, University of Tokyo, Japan

2010-2012

BEng Industrial Engineering and Operations Research, UC Berkeley, USA

2005-2007

Skills

Econometrics: Causal Inferences, Program Evaluation, Regression Discontinuity, Natural Experiment

Data Science: Supervised and Unsupervised Classification Algorithms, Natural Language Processing, Machine Vision

Computer: Python (numpy, pandas, sklearn), SQL, R, ArcGIS, git, Matlab, Stata

Language: English (Fluent), Cantonese (Native), Mandarin (advance), Japanese (advance)

Experience

Computational Social Scientist, Pew Research Center, Washington DC, USA

May 2017 - Current

Incorporate newly emerging computational methods with ongoing research initiative of the Data Labs. Project includes study of congressional rhetoric, Americans' online interest in guns, measuring rise of nationalism in UK politicians' social media accounts

PT Quantitative Researcher, UC San Diego Extension, USA

Dec 2016-Apr 2017

Built a machine learning prediction model to identify factors leading to academic success using data from a local high school.

Data Science Fellow, Data Science for Social Good, Chicago, USA

May 2016-Aug 2016

Built a machine learning prediction model to predict and identify students at risk of interacting with the juvenile criminal justice

Cleaned and merged datasets in python and SQL, experience with ETL process, created a machine learning pipeline

Our model performs 87% better than the baseline in identifying students at risk

Analyst, BlackRock, New York and San Francisco, USA

2008-2010

Provided ongoing support to external users of BlackRock's risk management software enterprise system. Specific tasks included writing SQL queries to identify trades that were booked, provided software training to external users.

Worked with the Relationship Management group to support sales and implementation process

Intern, MSCI Barra, Berkeley, USA

Jul 2007-Aug 2007

Updated and conducted extensive quality assurance on financial databases with data mining and data management software

Research

Advertisers Capture: Evidence from Hong Kong

Initiate and finish project from beginning to end

Code in R to construct a measure of political polarization on the newspaper articles

Code in python to scrape news articles, clean and extract useful information, and run multinomial logistic regressions to estimate and calculate the financial loss that a pro-Democracy newspaper suffered

Measuring Subjectivity in History Textbooks (Submitted)

Write Python scripts to clean the text, count adjectives, calculate the ratio of positive to negative words and employ word embedding (word2vec)

Celebrities Capture: Evidence from Weibo

Use Selenium to data mine Weibo (Chinese version of Twitter) to retrieve posts

Analyze trends that contain patriotic sentiment by studying the diffusion dynamics

Peer Effects and Political Preferences

Exploit random assignment of roommates on campus dorms to obtain identification of peer effect

Design and conduct survey on students' political preference for democracy and other "western values"

Other Experiences

PT Statistical Consultant, Wisers, Hong Kong

Jan 2017-Feb 2017

Guide the construction of a social media sentiment index on political candidates in Hong Kong

Organizer and Instructor, Machine Learning Workshop, San Diego, USA

Nov 2016

Organized and taught two machine learning workshop to economics PhD students

introduced basic concepts and different classification algorithm, application using [sklearn](#)

Teaching Assistant, UC San Diego, San Diego, USA

2012-Current

Served as a teaching assistant for 11 undergraduate courses

Focused primarily on introductory and intermediate microeconomics sequences

Research Assistant, Government Research Institute of Economy, Trade and Industry, Tokyo, Japan

Jan 2011-Mar 2011

Reviewed, edited, and wrote relevant research material on Chinese outward direct investments

Manufacturing Engineering Co-op, Intel, Albuquerque, NM

Jun 2006-Dec 2006

Developed metrics to measure equipment and factory capacity and output, identified run rate improvement projects, established accident prevention measures and planned training programs for personnel