Ian Finn

Data-Driven Researcher

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WORK EXPERIENCE

2019-11 - Present · **Economist**

Internal Revenue Service

- Analyzed financial data to value intangible property exchanged in inter-company transfer pricing transactions among Fortune 500 companies using local regression algorithms
- Researched industries, functions and supply chains to evaluate potential tax avoidance, forecast profit potential and efficiently direct the course of taxpayer examinations
- Explained and defended quantitative findings to taxpayers, taxpayer's representatives, team members and managers with varying backgrounds in statistical analysis with data visualization software
- Implemented financial models using econometric and machine-learning techniques in Stata and Python to propose a precedent-setting tax adjustment

2016-08 - 2018-08 · **Economist**

Welch Consulting

- Processed, cleaned and analyzed clients' raw employment and demographic data containing millions of observations across disparate databases and validated. Managed text retrieval of unstructured data and implementation of SQL queries to client databases
- Designed and trained a new algorithm to infer ethnic identification from surname that reduced test error by 7%. Utilized this algorithm to successfully defend a multinational company from certification of a class action lawsuit, saving hundreds of millions in potential damages
- Directly managed a team of researchers to ensure rigorous and incisive analysis, timely completion of projects, and responsiveness to client needs
- Developed a personal network of clients, in part through presentations at legal conferences and trade associations, and generated over $1,000,000 in annual revenue through hours billed

2011-08 - 2016-06 · **Graduate Student**

University of California, Irvine

- Generated new datasets which combined GIS raster, JSON and historical economic, occupational and census data. Augmented with geographical variables computed with Python and ArcGIS
- Developed and tested a game-theoretic model using statistical and causal inference techniques in Python, MATLAB, Stata and R. Presented findings at seminars and international conferences

2007-06 - 2008-06 · **Research Intern**

Beacon Hill Institute at Suffolk University

- Analyzed infrastructure, environmental and economic data for the 2007 State Competitiveness Report

EDUCATION

2011-08 - 2016-06 · **Ph.D. and M.A., Economics**

University of California, Irvine

- "Herbert F. York Global Security Dissertation Fellowship", University of California Institute on Global Conflict and Cooperation, October 2016, $18,000
- "Economics Summer Research Fellowship", University of California, Irvine, 2013, 2014, 2015, $6,000
- "All-University of California Group in Economic History Research Fellowship", University of California, 2014, $1,500
- "Kugelman Research Fellowship", Center for Citizen Peacebuilding, 2014, $1,000

2004-08 - 2008-06 · **B.A., Economics**

Boston College

- Omicron Delta Epsilon, Golden Key International Honours Society, Dean's List High Honors

CONFERENCE AND SEMINAR PRESENTATIONS

- "Understanding New York State Labor Law", FordHarrison LLP, New York City, January 2018 and 2017
- "Home Healthcare Litigation in New York State", Proskauer Rose LLP, New York City, March 2018
- Graduate Student Poster Session, Department of Economics, University of California, Irvine, 2013, 2014 and 2015
- Graduate Economic History Seminar, Department of Economics, University of California, Irvine, 2014
- "Institutions in Context: The Free Market" Conference, University of Tampere, Finland, June 2013
- Institute for Mathematical Behavior Sciences Seminar, University of California, Irvine, March 2013

PORTFOLIO

Articles Under Review

- **Finn, I.** 2019. "Coerced Labor, Insurrection and the Economic Costs: Theory and Evidence from the Antebellum United States."
- **Finn, I.** 2018. "Ties That Bind: The Political Economy of Coerced Labor."

Data Science Project

- An Analysis of Covid-19 Incidence in NYC

SKILLS

Data Analysis

Data Mining, Causal Inference, Classification, Multiple Imputation, Forecasting

Computer Programming

Python, Stata, R, SQL, MATLAB

Data Visualization

ArcGIS, Tableau, Excel

Machine Learning

K-NN, LASSO and Ridge Regression, Clustering, Model Evaluation

PROFESSIONAL CERTIFICATES

- Machine Learning Specialization, Univ. of Washington, Issued Jan. 2021, Credential
- IBM Data Science Professional Certificate, Coursera, Issued June 2020, Credential
- Intermediate Python, DataCamp, Issued August 2019, Credential

TEACHING FELLOWSHIPS

- Instructor, University of California, Irvine
  - The Global Economy (Summer 2015)

- Teaching Assistant, University of California, Irvine
  - Probability and Statistics for the Social Sciences I-III (Fall 2011, Winter 2012, Spring 2012)
  - Introduction to Microeconomics (Fall 2012, Summer 2013, Fall 2013)
  - Introduction to Macroeconomics (Summer 2012, Summer 2014)
  - Applied Econometrics (Summer 2013)
  - Intermediate Microeconomics (Winter 2014)
  - Advanced Macroeconomics (Spring 2014)