

Swati Sharma

Cross-functional thinker with a dedication to producing better outcomes using data. Self-sufficient programmer with a background in object oriented programming and keen interest in machine learning methodology. Economist by training, currently working as a consultant with EY.

EDUCATION

University of California, Santa Cruz — *M.S. Applied Economics and Finance*

August 2017 - June 2018

Quantitative masters degree exploring the application of statistics and machine learning to solve economic and finance problems.

Relevant learning: generalized linear models, non-parametric models, survival analysis, resampling/simulation (bootstrapping, monte carlo, cross-validation, randomization tests), KNN, clustering, decision trees, random forests, neural nets, ARMA, GARCH, VAR, MLE, numerical optimization (grid search, binary search, newton-raphson), linear projections, cointegration, state space models, kalman filter

University of California, Santa Cruz — *B.A. Business Management Economics*

September 2014 - June 2017

Relevant supplementary coursework: Introduction to Programming (Accelerated), Introduction to Data Structures, Algorithms and Abstract Data Types, Discrete Math, Game Theory, Evolutionary Game Theory

EXPERIENCE

EY, San Jose — *Transfer Pricing Consultant*

July 2018 - PRESENT

Facilitated the valuation of intangible property for multiple tax-effective supply chain planning (operating model effectiveness) projects and for post-acquisition integration planning. Assets valued total over \$40B.

University of California, Santa Cruz — *Graduate Teaching Assistant*

January 2018 - March 2018

Taught lecture for 300+ students before finals week. Taught two weekly sections, and held multiple office hours throughout the quarter. Graded numerous quizzes and assignments. Course: Introduction to Macroeconomics.

LEEPS Lab — *Research Assistant*

January 2016 - January 2018

Managed the recruitment of subject pool and financial transactions for experiments run during this time period. Worked with researchers to ensure the correct implementation of experimental protocol in their projects. Assisted in running sessions for various projects dedicated to the pursuit of understanding the underlying adjustment process to equilibrium in markets. Managed integration of biometric technology to capture affective emotional states of subject in experiments.

CONTACT

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 GitHub Profile

SKILLS

Data science: Forecasting, machine learning, data wrangling, data visualization, text mining

Applications:

RStudio, Jupyter Notebooks, Spyder, vi, PyCharm, Eclipse

Languages: R, Python, Java, C++, MATLAB, Stata, SQL, VBA

Leadership: Teaching, mentorship of peers, explaining technical material to nontechnical audience, project management

Other: Experimental Design

PROJECTS

Recommender System for Benchmarking Companies (Working project)

Built an item-item recommender system in python to identify which companies would be considered functionally and financially comparable to an existing client. Pulled S&P 500 income sheet data using yfinance library. Merged with dataset from datapackage which provides names of S&P 500 companies and their industry. Training set manually selected based off of industry experience in Transfer Pricing.

Hedge Fund Challenge

Predicted yield deviations of pharmaceutical companies based off of FDA calendar drug release dates. Wrangled Bloomberg and FDA data in R. Used cross-validation to select optimal bandwidth of time around release dates for non-parametric model. Implemented bootstrapping to ensure accurate out-of-sample predictions.