Gene Burinskiy

(408) 807-9664 | gene.burinsky@gmail.com| stackoverflow.com/users/1978817 (level 2000+)

Education

University of Southern California, Urban Planning Ph.D.   *August 2016-present*
- Researching the absence of rent-quality gradients in rental home markets and its causes in low-demand markets

Duke University, Economics M.A.   *August 2014-May 2016*
- Coursework in PhD level Statistics, Economics, and Computer Science
- Recipient of 95% tuition scholarship award – including two consecutive merit awards

UC Berkeley, Statistics B.S & Economics B.A. (Honors)   *August 2009-December 2014*

Dissertation – Chaired by Richard K. Green PhD
- Units of different quality but same price should not exist in a competitive rental market. I show this exists using AHS data
- Using Tax Assessor data, I estimate landlord market power in Milwaukee and test against prices across market quality segments
- Using MARS, AHS, and Saiz(2010) data, I characterize housing search and option sets for households across quality submarkets

Skills
- Programming/Analytics: Python, R, Matlab, LateX, VBA, STATA, SQL, SAS, Bash, Spark, Java, C+
- Knowledge: Regressions/Econometrics, Bayesian Modeling, Forecasting, Spatial Modeling, Clustering, Social Network, Dimensional Reduction, Categorical Models, Topic Modeling, Mixture Models, Time Series Analysis/Signal Processing, Sparse Regressions

Experience

Research Assistant – Jorge De La Roca   *December 2018 – Present*
- Used R to find areas of agglomeration in Latin America using LandScan raster data
- Ran analytics and produced visualizations for different parametrizations of the agglomeration-finding algorithm

Research Assistant – Professor Marlon Boarnet   *January 2017 – December 2018*
- Used over 20GB of FTB tax data to infer household mobility in LA County, income distributions, and longitudinal income patterns
- Used mobility data to test whether rail station opening impacted mobility rates and local income distributions
- Wrote technical report on findings and methods, presented findings at ACSP Conference

Research Assistant – Professor Raphael Bostic (Now president of Atlanta Federal Reserve)   *August 2016 – May 2017*
- Acquired and processed data for a newly proposed EITC housing assistance program
- Developed method and simulated cost of the assistance program under varying scenarios
- Published a robust Wikipedia table parser on GitHub and StackOverflow

Quantitative Risk Analyst Intern - DUMAC   *January 2016-July 2016*
- Wrote extensive software in Python and VBA to optimize, simulate, and analyze quantitative trading algorithms and asset allocation schemes.
- Collated, mined, and visualized financial data in custom dashboards using VBA and Python
- Automated data munging and merger of data for portfolio simulations and optimization

Research Assistant - Professor Patrick Bayer, Economics, Duke University   *July 2015-December 2015*
- Inferred social networks and identified user/business clusters using spectral clustering from Yelp user reviews in San Diego
- Wrote a screen scraper for the VA General District Court database: scraped over 15 million cases across 100 District courts

Research Assistant - Professor Charles Becker, Economics, Duke University   *January 2015-December 2015*
- Assessed efficacy of foreign aid on educational outcomes in Malawi using propensity scores and Bayesian Kriging

Connection Bar Consultant - SSRI at Duke University   *September 2014-December 2015*
- Aided undergraduates, graduates, and professors in quantitative research and statistical methods
- Helped and taught R, Python, Matlab for tasks such as data assembly, simulations, visuals, optimization, web scraping

Projects

Gentrification in San Diego Using Yelp data   *January 2015-May 2015*
- Identified gentrifying businesses in San Diego using SVM. Clustered users using Latent Dirichlet Allocation based on their reviews and visit histories then built a probabilistic model of gentrification and visualized results on rKNN approximated communities in San Diego, CA

Commercial Property Sales data   *April 2018-May 2018*
- Dumped .5TB of scattered CoreLogic data to a structured and searchable sqlite database for use by USC Price
- Wrote an interface in Python so colleagues without coding background can query the database and output CSVs

Tax Data for California Franchise Tax Board   February *2018-May 2018*
- Wrote a SAS program to re-geocode California tax filer addresses to Census blocks, block groups, and census tracts

Conference Presentations and Panel Chairs
- 2017 APPAM – *The Effects of City-level Tax Cuts on Commercial Prices on a panel on taxes*
- 2017 NARSC – *Do Tax Cuts Increase Business Activity: Evidence from the Los Angeles Business Tax Reform of 2004* (also chaired)
- 2018 ACSP -- *Gentrification Near Rail Transit Area: A Micro-Data Analysis of Moves Into Los Angeles Metro Rail Station Areas*