Ryan Martin
Rmartin81306@ucla.edu
4th Year PhD Student at UCLA
1620 Brockton Ave Apt 13,
Los Angeles CA, 90025
805 698 1229

Application To 2017 NBER Digitization Tutorial

Graduate Study Info:
- Year of Study: 4th (2016-2017 Academic Year)
- School: UCLA
- Second Year Fields of Specialization: Industrial Organization (IO) and Econometrics
- Advance To Candidacy: Planning to soon with IO of ecommerce as my dissertation topic
- Additional Coursework in Math and Statistics Department:
  - Completed (for credit) 1 Year Graduate Real Analysis Training (Partly Under Terrance Tao)
  - Currently 4 courses into an 8 course Graduate Minor in Statistics
    - Completed coursework includes courses in Applied, Theoretical, and Computational Statistics as well as an elective on Machine Learning
    - I plan to finish the minor by the end of spring quarter
- Computer Science Training:
  - Four (semester long) undergraduate Computer Science courses taken (during undergrad), including Data Structures and Intro to Algorithms, C Programming, Java Programming.
  - Extensive R programming through undergraduate research and graduate research projects, as well as undergraduate and graduate programming coursework
  - Halfway through Coursera Data Structures and Algorithms Specialization
    - Completed Courses on Algorithms on Graphs, Advanced Algorithms, and Data Structures, all of which include a large Python programming component
    - Working on Algorithms on Strings and Final Project coursework to complete specialization

Relevant Research Projects
- Summer 2016 – Present: research project with Justin Rao (MSR) and Giorgos Zervas (BU) on Price Dispersion in Online Markets
  - Project focuses on two large datasets: Pricing information scraped from price aggregator NexTag for a variety of goods over 3 month period and Internet Explorer user search/website navigation data.
  - We document how online search relates to price dispersion in online markets.
  - Project 70% finished. Hope to have a paper draft by December

- Summer 2016 – Present: my own research project on firms competing with their downstream distributor:
  - I am scraping online data to explore how firms that sell on their own websites compete with their own downstream distributors.

- I hypothesize that, through information asymmetries and customer loyalty, major firms are able to charge higher prices on their own websites than their distributors do for similar or identical products sold at other online sites.

- Fall 2016 – Present: Working with Wes Yin (UCLA Public Policy) and Richard Domurat (UCLA Econ PhD Student) on the federal government's insurance exchange subsidy's effect on individuals' choice of insurer in insurance exchange markets in California
  - Using IO models and techniques to estimate how large hospital networks drive up insurer premiums and affect individual choice across exchange markets in California
  - Especially, we are interested in measuring large hospital networks' ability to capture exchange market users' subsidies across California exchange markets.
  - Using novel micro exchange data and exchange enrollment information from US Government

- Summer 2016: RA for John Asker and Adriana Lleras-Muney on Taxi Cab Project
  - Searched for data on taxi cab prices throughout the US as well as data indicating how strongly taxi companies resisted ride-sharing services entrance to local taxi markets.
  - Gained invaluable experience in data search and research planning

- Summer 2016 – Present: 2nd year research paper in IO. Still undergoing revisions (for improvement only. I received passing score on first submission.)
  - I am analyzing the price effects of the US – American merger through diff-in-diff and the online DB1 dataset that consists of a 10% sample of airline prices.

- Summer 2016: My 2nd year research paper in Econometrics.
  - I developed a bootstrap method for creating consistent asymptotic confidence bounds for conditional CDF estimators under optimal bandwidth smoothing rules. The paper adapted earlier work from a 2013 Annals of Statistics paper by Hall and Horowitz that developed a methodology for estimating consistent asymptotic confidence bounds for conditional pdfs.

General Research Interests:
- I am very interested in online market behavior and how the economics of digitization are changing Industrial Organization, as evidenced most strongly by my research project with Justin Rao and Girogos Zervas, as well as with my own research project on online market competition. Both these projects attempt to explore how the internet has opened up new channels pricing information and changed firm competition.
- I am very excited about exploring other areas of the economics of digitization. I hope to make a career as a researcher in the economics of digitization. The economics of digitization matches well with my unique research background in statistics, computer science, and economics. I am confident I can contribute significantly to the field, especially with a jump start from a great tutorial program like this one!

Thank you for considering me! I will happily provide research references upon request.