Derek Topper

72 Nancy Boulevard, Merrick, NY 11566 ● derektopper@gmail.com ● (516) 477-3879

EDUCATION

University of California, Berkeley, Berkeley, CA
Bachelor of Arts in Data Science, Certificate in Entrepreneurship & Technology, Certificate in New Media (May 2019)
Relevant Coursework**:** Principles and Techniques of Data Science, Data Structures, Analyzing Cultural Data, Probability and Statistics in Data Science, Computing with Data, Probability & Statistics, Linear Algebra, Principles of Business, Economics, etc.

SKILLS: Python • SQL • R • Spark • SAS • TIBCO Spotfire • Java • HTML • D3.js • Spanish • Javascript • Microsoft Office

EXPERIENCE

Phoenix Suns Basketball Club, Phoenix, AZ, *Business Analytics and Data Science Intern,* Summer 2018
- Created an interactive dashboard examining Ticketmaster Resell data to allow various team executives to understand the single game operations of our secondary market, using SAS, SQL and TIBCO Spotfire
- Created various statistical models and metrics to dynamically predict individual game ticket sales and developed a variable pricing structure that set prices for each of next season's games, so the team could decide how much to sell each game for.
- Discovered over 46,000 previously unidentified illegal "Broker" seat resales, which could save the team over $3.4 million.

New York Mets Baseball Club, New York, NY, *Business Analytics and Data Science Intern,* Summer 2017
- Manage and examine the strategic planning of daily Citi Field food, beverage, merchandise, memorabilia and promotional operations and provided daily reporting to explore trends within our day-to-day undertakings.
- Crafted exploratory methods to improve Venue Services campaigns and undertakings through various predictive Python analytics, data metrics, enterprise decision management techniques, investigative reports, and customer surveys.
- Compiled information from the team's propriety business datasets to dissect market conditions and customer preferences to aid the team's recognition of rapidly-changing consumer trends and explore creative solutions to ad-hoc problems.

Berkeley Division of Data Sciences, Berkeley, CA, *Modules Lead Developer*, March 2017 – Present
- Planned syllabi and materials for two Data Science courses for the UC-Berkeley's Data Science Education Program, working with professors and graduate students to direct and implement these data-focused efforts.
- Developed dozens of lab and homework assignments, using Jupyter notebooks, on topics ranging from classification and regression techniques to the ethical concerns of "big data," to be deployed in a cloud computing environment for student use.
- Supervised two teams of students in researching topics, collecting data, modeling information and visualizing solutions.

Sports Analytics Group at Berkeley, Berkeley, CA, *Founder and President,* 2016 – Present
- Oversee the development of over 100 club members to consult for professional sports teams, produce dozens of data-driven sports research papers and data-centric sports journalism articles and learn about data science and machine learning.
- Command various special projects teams, in charge of independent research and analytics consulting for professional teams like the Golden State Warriors, Cleveland Cavaliers, San Jose Earthquakes, Cal Bears Football, and NFL/NBA trainers.
- Arrange external events with professional sport teams such as our SAGB Case Competitions, where we have partnered with the San Francisco Giants' and Sacramento Kings' Analytics departments, and our SAGB Speaker Series, where we have partnered with the Oakland Athletics and Golden State Warriors, to bring sports analytics professionals to our campus.

Daily Californian, Berkeley, CA, *Distribution Analyst,* 2015 – 2017
- Directed the process improvement for the weekly circulation of 40,000 newspapers over 150 drop locations.
- Collaborated with a team of six in operational advisory, decreasing rate of return by 50% over a 6-month period through various data metrics such as strategic A/B testing using Excel and Python.
- Analyzed readership data through the filing of weekly reports and monthly reports to develop and propose changes to distribution strategy for the newspaper to improve the return rates of Daily Californian boxes.

Mundial Sports Network, New York, NY, *Business Analytics and Operations Intern,* Summer 2016
- Prepared and filed monthly reports on the online traffic of over 15 million unique persons over more than 300 different owned or partnered websites, through GA and comScore data.
- Curated the serving of hundreds of thousands of targeted advertisements through DFP and Ad Exchanges for major clients like McDonalds, AT&T, JetBlue and Allstate & instituted a data management platform to understand our audience qualities.

ACTIVITIES

2015 – Present   Data Science Intern, Cal Football • Teaching Assistant, Principles of Data Science Course • Business Analytics Consultant, Optimir Consulting • Sports Chair, Business Careers in Entertainment Association • Sports Broadcaster, KALX Radio • Philanthropy Chair, Sigma Alpha Mu Fraternity

PROJECTS

- *Sports:* Developed a network analysis for the intersection of Twitter followers of American Sports teams
- *Fouls:* Modeled the idea of changing the expected value of 2 foul shots for every game in last 10 years, at NBA Hackathon
- *Values:* Used machine learning to develop sentiment analysis clusters in the last statements of death row inmates
- *Schools:* Analyzed educational data in R to research and visualize the effects of rising college tuition on American students