617-750-1121 sdg2145@columbia.edu

RECENT PROFESSIONAL EXPERIENCE

Data Science Intern, *NBCUniversal* (January 2017-Present)

- Used a big data environment to compile and merged complex datasets in order to calculate accuracy of linear forecasts in three quarters. Automated the process for future quarters.
- Created recursive algorithm to recreate lower level data from higher level aggregations. Saved team hours of manual input.
- o Proposed new deep learning strategies to improve time-series forecast performance. Researched and presented on new ensemble methods that could improve accuracy of team. Tested strategies on sample of forecast data.

Data Science Consultant, The Public Good Consulting Company (May 2017-January 2018)

- Designed and built large scale geospatial dashboard for client using shiny, JavaScript, and CSS
- Aggregated demographic data from ACS API and social data through Facebook API into a single interactive map interface and hosted online for client access.
- Independently researched Jewish service providers and condensed information into digestible report with interactive visualizations.

Shiny Dashboard Engineer, *Tenzo Tea* (December 2017-February 2018)

- o Built interactive business dashboard that allowed client to see in real time sales of product by quarter/month.
- Linked dashboard to google sheets which updated every hour.

Research Assistant, The Institute for Social and Economic Research and Policy at Columbia University (June 2017-September 2017)

 Created lesson modules for web scraping, API use, and data manipulation in both R and Python for QMSS program director; code and notes will be used in an intro programming class for QMSS students.

Research Assistant, The Institute for Social and Economic Research and Policy at Columbia University (January 2017-September 2017)

- Worked with Professor Costas Panagopolous on data aggregation, analysis, and presentation as well as writing for an upcoming book on challenger quality in Congressional races in the United States.
- Ran year-by-year iterations of the original regression model in order to create time series of the effects of independent variables over time. Added analysis to introduction of manuscript.

Volunteer/Data Intern, Hilary for America (September 2016-November 2016)

- o Canvassed for Chester County PA. Assisted team with events, planning, and office related needs.
- Cleaned data collected by field team; removing duplicates, merging profiles, and fixing names of individuals in VAN
 Volunteer. Ashrava Initiative for Children: Pune. India (September 2015-July 2016)
 - Established a mentorship program that identified high potential students in sixth/seventh standard and created a long-term plan to propel them to succeed at higher levels of education; personally mentored 10 students.
 - Installed a student information system using OpenSIS that improved organization's ability to track student performance.

360 Elite Sports/Tricky Skate in Los Angeles, CA (September 2014-April 2015)

 Coordinated with 360 Elite sports to redesign business plan and monetization strategy; continued as COO for Tricky Skate after company was acquired by 360 Elite Sports.

Chief Operations Officer and Co-founder, Tricky LLC. (April 2013-August 2014)

o *Tricky Skate* is a mobile application through which skateboarders record, share, and compete using a niche social network. Managed and coordinated all business operations.

TECHNICAL SKILLS

- Software and Programming Languages: R (dplyr, ggplot2, shiny, leaflet, tmap, dbplyr, markdown), Python (pandas, scikit-learn, numpy, scipy, Jupyer), SQL, Java, Latex
- Statistical Inference: Linear Regression, time series analysis, forecasting, penalized regression, panel modelling, multi-level modelling, Bayesian inference
- Machine Learning: Regression problems, classification, clustering, dimensionality reduction (random feature maps)

EDUCATION

- o Columbia University: 2016-2018
 - o MA in Quantitative Methods in the Social Sciences (Data Science Focus)
 - o GPA: 4.07
- Syracuse University: 2009-2013
 - o Dual Major: Economics and Political Science in the Maxwell School of Citizenship, Magna Cum Laude
 - o Renee Crown University Honors Program/Omicron Delta Epsilon (Economics Honors Society)