Sam Gass

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RECENT PROFESSIONAL EXPERIENCE

NBCUniversal, *Data Science Intern*, (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.
- 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.

The Public Good Consulting Company, *Data Science Consultant* (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.

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

The Institute for Social and Economic Research and Policy at Columbia University, *Research Assistant (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.

The Institute for Social and Economic Research and Policy at Columbia University, Research Assistant, *(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.

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

Ashraya Initiative for Children: Pune, India, *Volunteer (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.

Tricky LLC., *Chief Operations Officer and Co-founder (April 2013-August 2014)*
- *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
- **Columbia University: 2016-2018**
  - MA in Quantitative Methods in the Social Sciences (Data Science Focus)
  - GPA: 4.07 (A = 4.0)
- **Syracuse University: 2009-2013**
  - Dual Major: Economics and Political Science in the Maxwell School of Citizenship, *Magna Cum Laude*
  - Renee Crown University Honors Program/*Omicron Delta Epsilon* (Economics Honors Society)