Avani Gupta
MS in Interdisciplinary Data Science, Duke University 2020
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Professional Experience

Goldman Sachs, *Chicago, IL*

Associate, Decision Sciences   **April 2022-Present**

• Created a monthly multi-touch Markov attribution model to analyze and optimize customer journeys. The model incorporated 182 media channels to compare marketing effectiveness as determined by bank-specific KPIs. Applied various test and learn methodologies on top of the Markov model to optimize $62m in spending, resulting in a 29% decrease in cost per account.

• Created a marketing mix model using over 40 media channels and 4 years' worth of data to evaluate marketing effectiveness and ROI. Incorporated time lag features to create a linear-based optimization model with an $R2$ of 0.79, and converted said model into a budget optimizer using genetic algorithms.

• Created customer lifetime value clustering and segmentation for the bank's consumer banking product. Used methods in multivariate state change, transition matrices, and socioeconomic data to create high-value targeting groups for the marketing team.

Adelaide Lift, *New York, NY*

Senior Data Scientist   **February-March 2022**

Data Scientist   **August 2020-February 2022**

• Fully reformulated the business's primary value proposition, an internally created multi-channel, multi-device model created to measure the efficacy of advertising visibility. The established process used a straightforward non-optimized weight model, whilst the reformulated model is built upon a Random Forest base to convert binary outcome data to the needed continuous metric. For Desktop and Mobile-specific models, the performance improved 17x and 3x, respectively.

• Acted as the primary and singular Data Scientist at the company for 10 months, working with a Lead Engineer to take the model from its infancy to full productization, in addition to large-scale data cleaning and gathering efforts.

Imagine Entertainment, *Los Angeles, CA*   **June-August 2019**

Data Science Summer Intern, Imagine Impact

• Reformulated evaluation technique and regression algorithm of script assessment aptitude test, resulting in an increased accuracy rate from 7% to 68%. Developed ETL pipeline for said aptitude test data, gathered by pulling data in from survey platform API.

• Created automated document summarization tool to match document information to unstructured web-scraped text using NLP techniques for keyword evaluation.

MRM//McCann, *Hong Kong*   **2014-2018**

Account Manager, Strategy Team

• Managed in-house digital lead generation machine learning model for the Google Cloud Platform. Covered data management, lead scoring and prioritization, segmentation, model optimization, database management, and performance measurement. Led project's expansion to 15 markets in 1.5 years.

Education

Duke University – Graduate School, *Durham, NC*   **2018-2020**
Master of Science in Interdisciplinary Data Science *(May 2020)*

Tufts University - School of Arts and Sciences**,** *Medford, MA*   **2009-2013**
Bachelor of Arts in Economics, Minor in Communications and Media Studies *(May 2013)*

Skills & Knowledge

• **Languages**: R, Python, SQL, SparkSQL, Bash/Shell

• **Technical Skills:** Data Science, ETL, Statistical Analysis, Machine Learning, Natural Language Processing

• **Soft Skills:** Account and Project Management, Technical Product Management, Database Management

• **Tools:** numpy, pandas, scikit-learn, keras, pyspark, Jupyter Notebook, GitHub, Google Suite, Excel, Looker, SageMaker