

SARANG GUPTA

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EDUCATION

COLUMBIA UNIVERSITY

MS in Data Science (Aug 2018 start)

Courses: Algorithms for Data Science, Exploratory Data Analysis & Visualization, Data Modelling in Python, Machine Learning (Future)

New York, NY

Expected Dec 2019

THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY (HKUST)

BEng in Industrial Engineering and Engineering Management (IEEM)

BBA in General Business Management (GBM)

Hong Kong

May 2016

- GPA: 3.8/4.0 (Highest in IEEM class of 2016). Dean's List for academic excellence in 5 out of 7 semesters.
- Awards: Joseph Lau Luen Recruitment Scholarship, HK Government Reaching Out Award, Continuing Students' Scholarship
- Semester abroad at KTH Royal Institute of Technology, Sweden

TECHNICAL SKILLS

- Programming Languages – SQL, Python (numpy, pandas, matplotlib, seaborn), R (ggplot2, dplyr), VBA, JavaScript, PHP, HTML
- Data Analytics Tools – SPSS, SAS, Arena Simulation

PROFESSIONAL EXPERIENCE

GOLDMAN SACHS

Analyst – Investing and Lending Operations

Summer Analyst – Credit Sales and Trading Services

Hong Kong

Jul 2016 – Jun 2018

Jun 2015 – Aug 2015

- Developed tools using VBA to reconcile Credit Default Swaps positions between traders' risk system and controllers' books and records. The automatic reconciliation cut 15 hours of manual work per month.
- Analyzed the impact of failed bond trades on trading PnL using time series methods and developed recommendations to reduce costs by 20% (~\$100,000 savings per year).
- Created dashboards in Excel to perform weekly trend analysis of trading volumes and predict future activity; published reports for weekly strategy meetings with traders, strategists and desk heads.
- Led the migration of structured products business to Tokyo including devising the training plan, preparing training material and conducting sessions for VPs and associates. The migration led to a reduction in 0.5 FTEs (~\$ 40,000 savings per year).

UBS AG

Summer Analyst – Technology Division (Emerging Talent Program)

Zurich/Hong Kong

Jul 2014 – Aug 2014

- Analyzed different software development frameworks including IBM's Rational Unified Process (RUP), agile and evolutionary prototyping models used across IT business units of the firm.
- Presented a plan to regional directors to shorten the development cycle by converging components across different frameworks.

DATA SCIENCE PROJECTS

AIRBNB RENTAL LISTINGS DATASET MINING

Sep 2018 – Nov 2018

Semester Course Project, Columbia University

- Performed exploratory analysis of the Airbnb dataset to understand Airbnb rental landscape in New York City through static and interactive visualizations.
- Developed RShiny app that queries over word vectors built from 1 million customer reviews to generate Wordcloud of “closest” terms (<https://github.com/saranggupta94/airbnb>).

RWANDAN GENOCIDE ANALYSIS

Sep 2018 – Present

Graduate Research Assistant, Columbia University Medical Center (Advisor: Dr. Richard Neugebauer)

- Conducting a longitudinal statistical study using R on the relationship of violence during 1994 Rwandan genocide to mental health outcomes such as Post-Traumatic Stress Disorder and depression.

SIMULATION OF THE LAUNDRY SYSTEM IN UNIVERSITY RESIDENCES

Feb 2016 – May 2016

Semester Research Project, HKUST (Advisor: Prof. Xiaowei Zhang)

- Devised and implemented a data collection process to assess the current state of the laundry system in university residences.
- Built simulation models using Arena and performed statistical analysis of simulation outputs to assess system performance.
- Proposed solutions to improve the system utilization by 25%, reducing the average waiting time from 10 mins to 4 mins.

CUSTOMER SENTIMENT ANALYSIS USING SOCIAL MEDIA

Feb 2013 – May 2013

Corporate Project sponsored by IBM and Cathay Pacific Airlines

- Developed frameworks using IBM Cognos Consumer Insight tool to classify text snippets on social media to understand customer sentiments towards the airline's customer service channels.
- Presented a white paper with recommendations on establishing new communication channels to reduce the average response time by 18%. The paper was presented to senior partners from IBM and the airline..