## ANURAG GANDHI

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## **EDUCATION**

Carnegie Mellon University, H. John Heinz III College, Pittsburgh, PA

12/2017

Master of Information Systems Management- Business Intelligence and Data Analytics

Cumulative GPA: 3.83/4.33

University of Delhi, Netaji Subhas Institute of Technology, Delhi, India **Bachelor of Engineering, Manufacturing Processes and Automation** GPA: 3.45/4.00 (WES)

06/2014

# **SKILLS**

Tools and Programming: Python, R, SQL, SAS 9.3, JAVA, C++, Microsoft SSIS, OLAP, Weka, MS Access, Advanced Excel, VBA

Spring '17: Machine Learning (Theory), Interactive Data Science, Machine Learning for Problem Solving, Advanced Business Analytics, Data Warehousing

Fall '16: R for Analytics, Statistics, JAVA, Intermediate Database Management, Text Analytics, Python, Applied Econometrics Fall '17 (Planned): Big Data and Large Scale Computing, Decision Making under Uncertainty, Distributed Systems

### **WORK EXPERIENCE**

The Smart Cube, Noida, India

Senior Analyst - Data Analytics

10/2015 - 07/2016

(Client: a major supermarket chain in the UK)

- Led offshore project team to develop inverse association rules (market basket analysis) and time series based technique to identify substitute products during a retail promotion; designed an automated procedure using *Python, SQL* and *SAS*
- Worked on development of a promotional ROI assessment tool/dashboard for a major supermarket chain based in UK
- Modelled sales of more than 3,000 SKUs in 5 product categories using hierarchical mixed effects regression to isolate promotional impact from latent factors and deliver insights on drivers of successful retail promotional strategies; data sources range from large transaction data, competitor pricing and assortment of products to weather and events
- Used POS data for over 10,000 SKUs in 600 supermarkets to understand customer buying patterns and predict intensity of cannibalization when a substitute product is promoted; analysis helped client inform promotional strategy based on margin loss and make ranging and space decisions

## The Smart Cube, Noida, India

# **Analyst - Data Analytics**

08/2014 - 09/2015

- Developed Test and Control methodology (A/B testing) using time-series analysis techniques and designed metrics to measure effectiveness of retail campaigns, store refurbishments, concessions of a third-party retailer, and product trials
- Developed and automated anomaly detection algorithms to be integrated with a mobile application designed to provide performance alerts and daily reports to retail store managers.
- Measured "halo" impact of pharmacy on other products in a store, performed *k-means clustering* to group similar stores
- Independently handled client communications and increased performance efficiency of client's other batch retail analytics procedures by about 35%
- Conducted training sessions for project team members on retail data infrastructure in client's Enterprise Data Warehouse (Teradata), extraction queries in SAS-SQL, typical analysis process flow, and data pipeline automation
- Built data visualizations using Excel-VBA, Power BI, and PowerPoint presentations to communicate results to on-shore delivery manager and client team
- Honors & Awards: Best Debutant (2015), Kudos Award (2015), Smart Team Award (Dec 2014, Dec 2015)

## **ACADEMIC PROJECTS AND REPORTS**

Machine Learning: Working on course project to translate sign language to natural language 03/2017 - 05/2017

Data Warehousing: Built a warehouse, OLAP cube to model financial relationships in Healthcare

- 03/2017
- Data Mining (R): Exploration of factors affecting gender-income gap using NLSY97 dataset, R, and R Markdown 10/2016
- Implemented Bernoulli Naïve Bayes from scratch to distinguish between articles from two different sources 02/2017
- Text Mining: Performance comparison of machine learning algorithms (Naïve Bayes and SVM) and various text representations for classification and sentiment analysis. Public datasets: OHSUMED, Reuters, Amazon reviews 11/2016
- Text Mining: Frequency and co-occurrence analysis on Wall Street Journal text data to understand associations between entities (people, organizations etc.) 11/2016
- Data Mining in Python: Used NLTK and other libraries to perform frequency analysis on scraped web data
- Automated classification of fasteners for selective assembly using digital image processing
- 12/2016 05/2014

Used MATLAB and Arduino controller to build a physical prototype