

Ronak Shah

ronakdilip.shah@stonybrook.edu | (631)-428-0437 | Stony Brook, NY | LinkedIn:[/ronakshah52](#) | [Github](#) | [Blog](#)

EDUCATION

Stony Brook University, Stony Brook, NY

Expected Jul 2021

Masters of Science, Applied Mathematics and Statistics (Operations Research and Quantitative Finance) 3.93/4

Relevant Courses: Linear Programming, Convex Optimization, Probability Models, Computational Geometry, Simulation

National Institute of Technology, Surat, IN

2012-2016

Bachelor of Technology, Mechanical Engineering

8.51/10

SKILLS AND CERTIFICATIONS

Certifications: [Deep Learning Specialization](#), [Algorithmic Toolbox](#)

Programming Languages: Python, R, JavaScript, Bash, NumPy, Pandas, TensorFlow, MATLAB

Tools/Databases: MariaDB, MySQL, Hive/Hadoop, OracleDB, Excel, Tableau

PROFESSIONAL EXPERIENCE

Operations Research Intern | FedEx Ground Pittsburgh, PA

Jul 20 – Nov 20

- Understood data resources and improved operational efficiency by 20% by creating a robust ETL data pipeline
- Leveraged Python to mine, aggregate and store the data in a data warehouse
- Created a Single Source of Truth for consumption by the Optimization models and executive summary statistics

Software Engineer | Factspan Inc. Bangalore, India

Jul 18- Jul 19

Contractor | Walt Disney World

- Developed and deployed a robust automated room allocation system using Integer Program model for hospitality major on AWS Lambda Production system and improved allocation efficiency from 65% to 85%
- Developed data pipelines to manipulate data and build dashboard for custom defined Business KPIs and Model Performance

Contractor | Macy's

- Automated the A/B Testing Framework and successfully tested over 100 hypotheses across the website and mobile app leading to an increase in revenue of \$3 Million
- Migrated the A/B Testing Framework from a Frequentist to a Bayesian approach

Contractor | Heineken USA

- Built a novel cluster model that clubbed over 30,000 SKUs into similarly behaving Clusters
- Performed price sensitivity of the SKUs for the high value cluster
- Built a Machine Learning Model to attribute the sales to offline promotional campaigns

Contractor | Nike USA

- Developed a robust anomaly detection tool using machine learning model that flagged claims worth \$45 Million for fraud scrutiny
 - Pioneered and Developed a first version of AutoML in Python for rapid model prototyping
-

PROJECTS

Academic Project

R Language and Python

- American Option Pricing: Priced American put option using Simulated Annealing and Least Squares Monte Carlo
- PyTAQ: Developed a library of functions to support exponential smoothing

Factspan Initiatives

Python

- Led a team of 4 and organized a company-wide hackathon to predict the churn rate of resulting in a new billable account
- Worked as the Tech blog editor and published numerous blogs on optimization techniques and Machine Learning

Kaggle Competitions - Home Credit Default Risk

Python and Kaggle Kernels

- Built LightGBM and Decision Tree Model to predict the customers who were at a greater risk of default
 - Used various Feature Engineering techniques and finished in the top 50%
-

PUBLICATIONS & BLOGS

- Published conference paper on Wave Energy Converters of oscillating water column type
- Published a science fiction series on a personal blog
- Invented a constructed language for a fantasy world