

# PALAK JAIN

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## EDUCATION

### New York University- Tandon School of Engineering

*Master of Science in Management of Technology (STEM)*

**Focus area:** Data Analytics and Project Management, CGPA: **3.83/4.0**

**Coursework:** Statistics, Data Engineering, Python programming, Business Analytics, Data visualization

**New York, NY, USA**

*August 2019 -Present*

### National Institute of Technology (NIT Raipur)

*B. TECH, Chemical Engineering*, CGPA: **8.01/10**

**Raipur, India**

*April 2008 – May 2012*

## TECHNICAL SKILLS

**Languages & Tools:** Python (Scikit-learn, Pandas, Numpy, NLTK, Matplotlib, Seaborn), SQL, Tableau, R, Power BI ,Alteryx, Excel (VBA, Macros, VLOOKUP, Pivot tables)

**Technical concepts:** Machine Learning, NLP, Data analytics, Predictive analytics, Data mining, Statistics, Dashboarding

**PM skills:** Agile Project Management , Project planning & tracking using Jira, Project coordination

## WORK EXPERIENCE

### GlaskoSmithKline Pharmaceuticals, NY, US

*June 2020 – Dec 2020*

*Data Science Intern*, Global Vaccines Data & Analytics Division

- Developed Natural Language Processing based Protein language model, which aims to model amino acid sequences of protein using NLP methods for downstream tasks used in vaccine and drug development. The model achieved an accuracy of 75%
- Conceptualized and launched an internal Data & Analytics Speaker Series aimed at increasing the general know-how of Machine Learning (ML) and Artificial Intelligence (AI) in healthcare

### NEW YORK UNIVERSITY, New York, US

*Graduate Assistant*, Polytechnic Tutoring Centre

*August 2019– May 2020*

- Developed SQL queries to extract daily reports on visits, service availability, and work hours of student visits

### ACC LIMITED (LAFARGE-HOLCIM GROUP), Durg, India

*Data Engineer*, Jamul Expansion Project

*Jan 2017 – Feb 2019*

- Built statistical models in coal grinding area to monitor real-time variations in the quality and particle size distribution of coal, ramping up cement production to 6000 tons/day from 4500 tons/day
- Co-led a team of 6 in the engineering stage to finalize plant layout, 3D designs, for a \$377MM cement plant construction project
- Optimized electrical energy consumption from 37 to 35 kWh/ton in cement grinding phase using particle size distribution and data modelling tools, resulting in savings of 10 % in production costs from \$1600/ton to \$ 1400/ton

### ACC LIMITED (LAFARGE-HOLCIM GROUP), Durg, India

*Project Manager*, Procurement and Process quality control (QC)

*May 2012 – Dec 2016*

- Engineered co-processing of industrial waste reduction, resulting in thermal substitution rate (TSR) of 2.45% in 2018 vs. 0.91% in 2017. Consequently, CO2 emissions were reduced by 1.7%
- Developed quality management plan (QMP) for cement manufacturing process using **Tableau** and included parameters such as statistical sampling, benchmarking, and control charts, achieved 60% increase in production rate from 250 TPH to 400 TPH
- Collaborated with cross-functional teams in the project planning stage to plan, design and monitor the progress of projects using PM tools such as Gantt charts and Critical Path Analysis (CPA)

## ACADEMIC PROJECTS, New York University

### Loan repayment prediction using R

*Fall 2021*

- Developed a prediction-based model using R to forecast client's loan repayment abilities based on existing payment data. Achieved an accuracy of 72% with a recall rate of 62%

### COVID-19 impact on unemployment

*Spring 2020*

- Evaluated the economic impact of COVID-19 for 6 countries and predicted the unemployment rate for 2021 and 2022, using Python statistical modeling, regression & clustering, and achieved a positive correlation between deaths and employment rate

### Operational analysis of customers shopping experience at SHOPRITE

*Summer 2020*

- Identified process performance gaps in the operational cycle of customers' shopping activity using value stream mapping, process capabilities metrics, and recommended a 10 % reduction in cycle time and a 30 % increase in revenue