

Kshitij Yadav

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OBJECTIVE: To use my talents as a mission-centered data-driven leader, among a team of results-driven Product Managers, Data Engineers, and marketing managers, dedicated to achieving mutual goals, while providing opportunities for personal growth and advancement.

SKILLS:

Product Analytics | Machine Learning | Experimental Design | Statistics | Product Management

TECHNICAL SKILLS:

Machine Learning: Classification/Regression, Probability Theory, Feature Engineering, Experimental Design, Observational Studies

Statistical tools and programming languages: R, Spark, Scala, Python (scikit-learn, numpy, scipy, pandas, seaborn, matplotlib), SQL, GitHub, AWS Cloud, GCP, Data Studio, Looker, Quicksight, S3, Lambda, Tableau, Docker

EXPERIENCE:

Moody's Analytics, NYC

Associate Director

April 2023 - Present

- Currently spearheading the design and development of a robust conversational AI application, leveraging cutting-edge technologies like OpenAI's GPT-4 and Llama 2, Streamlit, and Python to enable real-time data analysis
- Integrating the power of Natural Language Processing with Langchain to transform complex data analysis into user-friendly interactions, anticipating to empower non-technical users to perform data analysis, thereby driving data democratization in the organization.
- Leading initiatives at Moody's to apply causal inference and AB testing methodologies, enabling data-driven decision-making and optimizing business strategies
- Spearheading the development of recommendation engines for personalized user experiences, leveraging advanced algorithms and data analysis techniques to deliver personalized experience to users
- Guiding teams in data analysis, statistical modeling, and machine learning techniques at Moody's, extracting valuable insights and providing actionable recommendations.
- Leading the implementation of robust data pipelines and utilizing tools such as Python, R, and SQL to handle large datasets effectively, ensuring data quality and delivering impactful results

Wayfair, NYC

Data Science Manager, Product Analytics and Experimentation

October 2021 - Present

Leading a team of four data scientists for Wayfair's analytics team, which is focused on product engagement, analytics, and experimentation

- Designed, ran, and validated multiple lift studies to measure incrementality of Wayfair's \$1.5 billion marketing program
 - Led teams to engineer systems to incorporate insights from Causal inference to understand and measure long-term incremental value of key customer actions and events to inform a wide variety of marketing and investment decisions
- Engineered and led the product development of "Themis," a Shapley Machine Learning solution for understanding incremental dollar amounts for each marketing channel.
 - Iterated through multiple versions of the product to improve the algorithm (*\$150MM in opportunity cost saved)
 - Analyzed data to understand where to focus data science resources for product development to identify product development opportunities
- Led the establishment and vision of the Analytics workstream within the organization for Data Science and Machine Learning
 - Collaborated with senior leadership and product managers to translate business needs into strategic projects with the objective of increasing product engagement, enhancing customer experience, and driving long-term value for customers and business
 - Used data to determine whether to target **large parcel** SKUs at the same efficiency as **small parcel** SKUs for long term revenue accrual
 - Analyzed billions of data points to understand **long term revenue accrual for marketing during the holiday season**, informing stakeholders on how to improve efficiency via data driven strategy (+5% gain)
 - Designed ML monitoring dashboards to provide analysts on call with a **360-degree view of various ML models**
 - Developed testing strategy (synthetic data) to test attribution for new geographies and channels
 - Analyzed data from lift studies to inform marketing strategies for campaigns, **leading to a 3% improvement** in key marketing KPIs for paid channels, and built an automated pipeline utilizing visualization tools for self-service
 - Leveraged AI Notebooks, SQL, Tableau and Looker to translates insights into automated dashboard for consumption by stakeholders
- Led product vision and facilitated and guided conversations among **the leadership of different stakeholder** teams to drive adoption of Moirai, a ML driven solution using Shapley for different business cases -
 - The storefront team leverages Moirai to understand the incrementality of each page toward an Order
 - The Supply Chain team utilizes Moirai to understand the incrementality of distribution centers toward package damage
- Led sprint planning for the Product Analytics team for our core products in Experimentation and Attribution

Moody's Analytics, NYC

Assistant Director | Data Scientist - Customer Analysis and Personalization Initiatives

May 2021 - October 2021

- Responsible for leading personalization initiatives at Moody's for Moodys.com
- Architected Credit View first recommendation engine using Factorization Machine, and leveraged AWS cloud technologies to deploy the model in production end to end
- Engineered Customer Satisfaction Score metric by leveraging ML, and segmented users based on this metric for account monitoring, user risk profiling, and product value proposition
- Managed team to develop and track content score KPI, to understand features that contribute to a successful content on Moodys.com, and to help analyze and justify Investor Services Analyst resources for each research document published
- Effectively analyzed, tracked, and identified employers of almost 12% of anonymous user's visiting Moodys.com to provide leads to the sales team for converting them into paid customers.

Senior Product Manager | Data Scientist - Customer Intelligence

August 2018 - May 2021

- Worked on building BI-LSTM and CNN Deep Neural Nets to identify sentiments of Investor Services research documents
- Engineered machine learning algorithm and filters to detect and catch customers sharing account credentials, boosting the company's product revenue through subscription renewal by ~ 7%
- Designed and engineered Churn Modelling algorithm for customers, efficiently and accurately segmenting their risk profiles and providing key information to account managers during contract renewal, ultimately leading to higher renewal rates and \$ value
- Use statistical tests and data analysis to determine customers using BOTS and web-crawler to scrape data and information from Moodys.com, safeguarding it from reckless users and content infringement attacks
- Implemented Machine Learning algorithm to personalize Moody's on-site search for its customer based on individual users' usage
- Built tool in tableau to help deliver key business and strategic insights to managing directors and key stakeholders

Colaberry, Boston, MA

Feb 2017 - Dec 2017

Data Scientist

Overview: Colaberry <http://colaberry.com/> | Refactored <https://www.refactored.ai/>

Responsibilities:

- Participated in all phases of research including data collection, data cleaning, data mining, developing models, and visualizations.
- Worked on large datasets, transformed information from raw data into meaningful analysis that identifies trends and predicts outcomes using various linear and nonlinear models
- Developed a web-scraper from scratch using python, to collect data from relevant blogs/articles/news on the internet and perform various analysis on the data using NLP techniques to get insights
- Leveraged data to provide strategic business decisions to increase sales and effectiveness of marketing efforts of the team
- Created dashboards to provide information on current marketing KPIs and actionable marketing insights using tableau.

ZS Associates, Gurgaon, IN

July 2014 - May 2016

Business Operation Associate

Overview: Consultant | Analytics | Data Strategy

- Led teams in various client engagements, managed client relationships.
- Designed, built, and fine-tuned predictive models to determine sales-rep goals, helped the client with the decision making, cutting their losses substantially and making them 7% more profitable.
- Conducted market research for a client; analyzed the survey data to strategize client's product launch using data science
- Engineered complex incentive compensation model using SQL-based tool for a client's business unit having 1000+ sales representatives.
- Secured \$12 million-dollar funding of client renewal business for the company for which was awarded Operational Excellence award
- Managed to retain my project team with zero attrition and 100% client satisfaction.

EDUCATION:

The University of Texas at Dallas, TX

Aug 2016 - May 2018

M.S. Business Analytics concentration in Data Science | GPA: 3.7/4.0

Coursework: Machine Learning Algorithms, Statistics, Linear Algebra, Probability, Advance data science concepts

Army Institute of Technology, India

June 2010 - July 2014

Bachelor of Engineering in Electrical and Telecommunication Engineering | CGPA: 3.9/4.0

Employment eligibility: Eligible to work in the U.S

Portfolio: <https://kshitijyad.github.io/>