# Sitanshu Kushwaha

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• New York

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### **PROFESSIONAL EXPERIENCE**

#### Data Engineering Intern, NBCUniversal

Jun 2024 – Present | New York

• Developed and deployed an ML-powered reporting system on Databricks, leveraging MLflow, CI/CD pipelines, and automated testing to determine the optimal cutoff time for live sports broadcasts, maximizing viewer engagement and ratings for Nielsen reporting.

### AI & ML Engineer Intern, NYU IT

Oct 2023 – Present | New York

- Orchestrated an ETL pipeline using Airflow and dbt to collect, transform, and store metadata in Snowflake, enabling a RAG system for LLM-powered impact analysis, allowing developers to assess schema changes, track dependencies, and retrieve insights on jobs, tables, and stored procedures.
- Developed a GenAI-powered chatbot in Streamlit with conversational memory, enabling developers to query Snowflake metadata using natural language, receive contextual follow-ups, and analyze schema modifications, leveraging LLMs and Cortex AI for intelligent retrieval and automated impact assessment.

### Data Engineer, LTIMindtree

Jan 2021 – Jun 2023 | Mumbai

- Led the Data Engineering team to optimize Databricks Spark code, reducing execution time by 30% for transformation jobs, improving scalability and data timeliness for multi-TB datasets.
- Implemented a CI/CD pipeline in Azure DevOps, automating build validation, testing, and deployments across environments, reducing manual effort by 70% and ensuring code reliability.

### Machine Learning Engineer, Oniria Creations

Mar 2020 – Dec 2020 | Remote

- Trained a text classification model using BERT embeddings as input features and TensorFlow, achieving 92% accuracy in identifying pet service provider websites from Bing search results.
- Developed an automated NLP pipeline leveraging Named Entity Recognition (NER) and a fine-tuned BERT model to extract and categorize structured data (e.g., business details, services, pricing) from pet service provider websites, building a comprehensive, queryable database.

### Intern Machine learning Engineer, Toflo Fintech Consulting

Dec 2019 - Mar 2020 | Mumbai

• Engineered a hybrid Recommender System for an e-commerce platform, combining collaborative and content-based filtering algorithms. Implemented A/B testing to evaluate performance.

#### **EDUCATION**

New York University, MS in Computer Science

Sep 2023 – May 2025 | New York

University of Mumbai, BE in Computer Engineering

Aug 2016 – Nov 2020 | Mumbai

### SKILLS

Machine Learning (— Scikit Learn, Tensorflow, NLP, Neural Networks, Deep Learning, Models - Regression models, Decision Trees, XGBoost, SVM, K-means, Hierarchical Clustering, PCA, CNN, RNN, LSTMS, ARIMA), Big Data (Apache Spark, Kafka, Databricks, Azure, AWS, GCP, Data Lake, ETL, NoSQL), Data Visualization (Tableau, Matplotlib, Seaborn, Plotly), Languages (— Python, JAVA, SQL), Tools (— Git, Docker)

## PROJECTS

#### Beyond the 9 to 5: A Multivariate Analysis of Work-Life Balance, Commuting, and Job Attrition,

Data Analysis, Statistical Modeling, Data Visualization ☑

• Analyzed the influence of work-life balance and commuting distance on job attrition, with findings indicating that improved work-life balance and shorter commutes are associated with lower attrition rates, mediated by job satisfaction.

#### Talk2Doc - (GCP, RAG, LLM, APIs)

- Architected a centralized ecosystem for students using Google Cloud Platform (GCP), integrating Retrieval-Augmented Generation (RAG) for personalized note searching and automated job application tracking.
- Built modular, event-driven highly scalable system utilizing serverless functions, queues, LLM capable of handling millions of users.