

Ritu Kukreja

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Summary

Data Scientist with 3 years of experience in finance and IT sectors. Proficient in Python, Django, and machine learning, with a specialization in developing predictive models and optimizing algorithms. Skilled in Tableau and Power BI for data analysis and visualization. Led projects in customer segmentation, ROI maximization, risk assessment, and operational efficiency, delivering actionable insights for organizational success.

Technical Skills

Languages:	Python, R, Machine Learning algorithms, HTML, CSS, JavaScript, Bash, XML, JSON
Frameworks:	Django, Flask, Scikit-learn, NLTK, OpenCV, PySpark, LIME, SQLAlchemy
Cloud:	AWS S3, AWS EC2
Databases:	SQL, Oracle, MySQL, MongoDB, Postgres, Database Design
Analytics:	Excel, Power BI, Tableau, Pandas, NumPy, Regex, Matplotlib, Seaborn, Natural Language Processing
Tools:	Git, VS Code, Jupyter Notebooks

Professional Experience

Data Glacier - Philadelphia, PA

August 2023 – November 2023

Data Science Intern

- Reduced resource consumption by 15% and improved data-driven decision making through technical data cleaning, analysis and visualization
- Integrated a Flask application with Linear Regression on AWS, optimizing processes and potentially reducing operational costs
- Oversaw YAML files and contributed to open-source projects, fostering innovation and collaboration within the data science community

ICE Design and Analysis Lab, Drexel University -Philadelphia, PA

June 2023 – November 2023

Research Assistant

- Efficiently managed multiple university-wide data science projects, ensuring timely delivery and high-quality outcomes
- Optimized workflows and achieved a 30% reduction in project completion time, saving university resources
- Enhanced data visualization accuracy, improving research findings' reliability and potentially increasing research impact
- Conducted statistical analysis to increase accuracy, positioning projects for more impactful outcomes and potential additional research funding

Infosys – Pune, India

March 2022 – August 2022

Associate Consultant

- Enhanced communication and collaboration tools, improving client satisfaction and contributing to a 10% rise in annual revenue through repeat business
- Implemented PostgreSQL integration using SQLAlchemy, ensuring efficient data storage and management, potentially saving time by 40% and releasing resources
- Employed Alembic for schema migration, facilitating real-time data updates and management, which could improve operational efficiency
- Boosted efficiency by 25% through optimized processes and resource allocation, leading to significant cost savings

Markytics.AI – Mumbai, India

October 2020 – March 2022

Data Scientist

- Automated document handling with a web-based system using Python and Django, reducing processing time by 30%
- Developed and optimized predictive models for loan prediction using machine learning, neural networks, and feature engineering, achieving an 85% accuracy rate
- Conducted data mining and A/B testing, improving algorithm performance and increasing predictive accuracy by 40%
- Created analytical dashboards with Python, Power BI, and Tableau, utilizing SQL for data mining and pipeline management, resulting in a 25% increase in data insight quality

Here Technologies – Navi Mumbai, India

August 2017- April 2019

Spatial Data Analyst

- Integrated geospatial data from multiple sources, including GPS, LiDAR, and satellite imagery into a unified platform using ETL processes
- Visualized data and dashboards using Tableau and Power BI, generating reports that improved decision-making speed by 25%
- Collaborated with cross-functional teams to design and develop geospatial products, ensuring products meet the needs of stakeholders
- Conducted rigorous quality control procedures, ensuring geospatial data compliance with technical specifications, reducing errors by 20%

Project Experience

Metflix: Movie Recommender System - ([Deployed on Google Drive](#))

March 2023

- Implemented collaborative filtering algorithms including Singular Value Decomposition (SVD) and content-based filtering methods such as Cosine Similarity and KNN
- Demonstrated expertise in strategic feature engineering, data preprocessing, and model evaluation, contributing to a 30% improvement in recommendation accuracy
- Conducted A/B testing to refine the recommendation algorithm, leading to a 20% increase in user engagement

Pandemic VS Health Adjacent Stock Prices - ([Deployed on GitHub](#))

January 2023

- Conducted comprehensive analysis of pandemic's impact on healthcare stock prices using Python, NumPy, Pandas, Matplotlib, Seaborn and computer science algorithms
- Identified significant correlations between pandemic events and fluctuations in healthcare sector stocks, revealing insights with a correlation coefficient of 0.75
- Addressed coding issues for data visualization, ensuring accurate and clear representation of insights
- Created detailed reports and dashboards to communicate findings to stakeholders, supporting data-driven decision-making
- Optimized Jupyter Notebook for data analysis and GitHub for version control and project deployment, enhancing collaboration and accessibility

- Crime Rate Prediction in LA - ([Deployed on GitHub](#))**
 - Spearheaded the creation of a robust predictive model for forecasting discovery crime rates in Los Angeles leveraging PySpark for big data processing, diverse ML algorithms, including regression and classification models, and libraries such as Matplotlib and Scikit-learn
 - Achieved 85% accuracy in crime prevention strategies by employing advanced analytics to refine the model, demonstrating expertise in data analysis and model optimization
 - Developed interactive visualizations using Matplotlib to present findings

March 2022
- Flying Food Truck Website - ([Deployed on GitHub](#))**
 - Crafted a dynamic web application for food truck businesses utilizing HTML, CSS, JavaScript, and Django, enhancing user experience and accessibility
 - Designed responsive and user-friendly interfaces ensuring optimal performance across various devices and browsers
 - Optimized website load times and performance by employing best practices in web development, such as efficient asset loading and minimalistic design
 - Conducted user testing and gathered feedback to continuously refine the user interface and ensure it meets user needs and preference

October 2020

Education

- Masters in Data Science**
Drexel University – Philadelphia, PA

June 2024
- Bachelors in Electronics Engineering**
University of Mumbai – Mumbai, Maharashtra

May 2017

Achievements, Certifications, Memberships

- Member- Academic Excellence, **Upsilon Pi Epsilon Honor Society**

July 2024
- Data Analytics and Visualization Job Simulation, **Accenture**

July 2024
- Data Visualisation: Empowering Business with Effective Insights, **TCS**

June 2021
- Data Science Training, **Internshala**

October 2020
- Diploma in Python & Machine Learning, **I.T. Vedant Education**

October 2020
- Introduction to Programming using Python, **Microsoft Technology Associate**

October 2020