Rahul Nair

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WORK EXPERIENCE

Analytics Engineer, M1 Finance, IL, USA (Jul 2021 – Present)

- Led enterprise-level strategic analytical projects to drive marketing initiatives, including automating business reviews with a focus on north star metrics like new users acquired and product-specific sign-ups using **Tableau**.
- Executed various analyses (pre/post, causal, regression, etc.) optimizing onboarding flow and loyalty program features using **SQL, Python and Excel** which resulted in an increase in activation rate and a 15% improvement in onboarding drop-off rates.
- Spearheaded A/B testing and Multivariate testing utilizing **Amplitude** and **LaunchDarkly** for promotional acquisition and email marketing campaigns, and evaluated the statistical significance of new approaches to aid stakeholders in decision-making.
- Designed data models using **DBT**, deployed them into **Redshift (AWS)** and optimized efficiency and quality using unit testing, resulting in a 25% reduction in reporting time and an improved ETL process. Automated data alerts using **Python** scripts.
- Built user onboarding fraud detection model using **Python** and **Dataiku** which detected issues and sent alerts via Slack **API**, resulting in an increased transparency and flagging fraudsters with a recall of 87%.
- Engineered and implemented innovative underwriting logic for personal loans using **Provenir** and credit card using **Deserve**, streamlining the decision-making process and enhancing the efficiency of risk assessment.

Analytics Engineer (Volunteer), Knox County Commissioner Campaign, TN, USA (Sep 2023 – Dec 2023)

- Spearheaded the integration of voter information from **Google Cloud Storage (GCS)** into a sophisticated political advertising tool (**El Toro**) by mapping IP addresses for all voters, with a match rate of 76%, resulting in highly targeted and personalized political advertising that maximized campaign impact.
- Developed run-time optimized **SQL** queries using **Big Query** (Google Data Studio) to retrieve voters with desired attributes, resulting in a 30% improvement in data processing speed.
- Collaborated closely with cross-functional stakeholders, including campaign strategists and IT professionals, to seamlessly integrate data solutions into the broader campaign framework.
- Led data science initiatives focused on optimizing voter outreach strategies by analysing VAN datasets and extracted meaningful insights, resulting in optimized voter lists in line with target key demographics.

Analytics Engineer (Practicum Student), Labelmaster, IL, USA (Jan 2021 – May 2021)

- Optimized complex **SQL** scripts for rigorous quality checks in projects. Implemented **Azure Pipelines** for deploying tables and provided insights for scaling the infrastructure.
- Led the automation of hourly status reports using **Power BI**, resulting in a reduction of 10 hours per week. This initiative streamlined response times for issue resolution and campaign failure mitigation.
- Achieved an accuracy of 10% mean absolute percentage error (MAPE) in price forecasting using **SARIMA** and presented the forecasted values to executives via web app built using **HTML** and **CSS**.

Analytics Engineer (Intern), Illinois Institute of Technology, IL, USA (May 2020 – Oct 2020)

- Developed interactive visualizations using **Looker** empowering stakeholders to engage with data, facilitating decision-making.
- Automated ETL processes using Prefect (**Python**), boosting data wrangling efficiency and reducing time by 40% through normalized database operations.
- Managed the analytics project intake from stakeholders across all departments using **JIRA**.

Analytics Engineer (Intern), Epic Minds IT Pvt. Ltd., Delhi, India (Jun 2018 – Aug 2018)

- Collaborated with the Agriculture Research team, collecting 18,000 images of diseased crops from various sources.
- Achieved 86% accuracy with **Python**-based image classification using Google Inception V3 transfer learning.
- Implemented a web interface with **Django** and **Flask**.
- Automated data migration from **SQL** Server to **Snowflake** using **SnowSQL** and **SnowPipe**, including dimensional modeling.

SKILLS

- **Programming:** Python (pandas, scikit-learn, seaborn), R, JAVA, C, C++, SAS, Pyspark, HTML, JavaScript, PostgreSQL, MySQL
- **Big Data Ecosystem:** Spark, Hadoop, MapReduce, Hive, Pig, Kafka, HBase, Salesforce, OLAP, SaaS, VoteBuilder, SAP, ERP
- **Cloud Technologies:** AWS (S3, Athena, Redshift, EMR), NoSQL, Cassandra, Snowflake, Oracle, GCP, Hadoop HIVE, MongoDB
- **Tools:** Looker Studio, Power BI, Azure ML, Databricks, Excel, GitHub, DBT, Google Analytic, Dataiku, Docker, Airflow, GIT
- **Soft Skills:** Public Speaking, Creative thinking, Collaborative, Analytical Skill, Problem Management, Accountable, Fast-paced
- **Areas of expertise:** Business Analysis, Data Analysis, Data Management, Data Accuracy, Business Intelligence, Data Modeling, Statistical Analysis, Data Quality, Data Virtualization, Reporting, Presentation, Agile, Data Visualization, AI, Data Governance

EDUCATION

- MS in Data Science, Illinois Institute of Technology
- B. Tech in Computer Science, University of Petroleum and Energy Studies

PROJECTS

- **CLUSTERING AND REGRESSION ANALYSIS OF GERRYMANDERING**

  Implemented weighted k-means for a more equitable redistricting plan in Pennsylvania, ensuring a 60% enhancement in population distribution fairness across districts.

- **STATISTICAL ANALYSIS OF FACTORS INFLEUNCING LIFE EXPECTANCY**

  Conducted Analyzed correlations between immunization, socio-economic, and health factors to predict life expectancy based on Feature Importance techniques for individuals in different countries.