Raghav Khurana

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SKILLS

- Analytical Tools: Adobe Analytics, Customer Journey Analytics, Google Analytics, Tableau, Power BI, QlikSense
- Programming Languages: R, Python, SQL, Java, JavaScript, HTML, Node.js, SQLite3, NoSQL
- Analytical Methodologies: Regression Analysis, Neural Networks, Machine Learning, Supervised/Unsupervised Learning, Clustering, Time-Series Analysis, Classification, Decision Trees.
- Miscellaneous Tools/Skills: Git, JIRA, MS Office, Jupyter Notebooks, SDLC, Data Visualization, EDA, Statistics, Business Intelligence, Agile Methodology, Scrum, E-commerce, Databases, Oracle SQL, ETL, Googling.

WORK EXPERIENCE

Data Analyst (TA) | University of South Florida, Tampa, FL

August 2023 – December 2023

Key Skills: R, Statistical Analysis, Time-Series, Regression, Demand Forecasting, Hypothesis Testing, Mentorship

- Assisted instruction for a graduate Analytics course, mentoring 120+ MS and MBA students through advanced statistical techniques, including hypothesis testing, confidence intervals, and Logistic Regression using R.
- Collaborated with faculty and business partners to identify demand forecasting opportunities and proposed solutions using Time-series analysis, predictive modeling, statistical analysis, PowerBI, and feature engineering.
- Developed, validated, and executed Time Series predictive models using **Autoregressive Integrated Moving Averages (ARIMA)** and python's 'Prophet' library, resulting in a **27% improvement** in forecasting accuracy.

Data Engineering Researcher | University of South Florida, Tampa, FL

May 2023 – August 2023

Key Skills: Data Engineering, Data Warehousing, SQL, Data Engineering, Python, Dimensional Modeling, Tableau

- Led the end-to-end development of a Data warehouse and implemented a **SQLite3 ETL data pipeline** in **Python** using Kimball's dimensional data modeling, resulting in a **20% increase in data processing efficiency**.
- Utilized **Data Analytics, Tableau, and Power BI** to analyze structured & unstructured data and contribute to the development of the 'Fundamentals of Information Technology' textbook used **across schools in the State of Florida**.

Data Analyst (Systems Engineer) | TATA Consultancy Services

July 2020 – June 2022

Key Skills: Digital Analytics, A/B Testing, API Integration, Retail Analytics, Data Visualization, Marketing Analytics

- Spearheaded end-to-end digital analytics initiatives, employing tools such as Adobe Analytics, Customer Journey
 Analytics, and Google Analytics to measure and optimize post-login digital sales and checkout funnel, enable user interaction tracking, and create performance dashboards.
- Developed and Implemented CRO strategies, increasing conversion rates by 45% from 2.11% to 3.07%.
- Leveraged statistical techniques, research, and data-driven insights to tailor client experiences, **drive full-funnel productivity**, enhance customer engagement, and recommend solutions for anticipated roadblocks.
- Utilized A/B testing to optimize site flow, analyze marketing campaigns and reduce checkout flow choke points.
- Collaborated with **cross-functional**, **global teams** to analyze and interpret data trends, providing meaningful, actionable stories and insights to drive business outcomes for clients.

Web Analytics Developer (Asst. Systems Engineer) | TATA Consultancy Services

August 2019 – July 2020

Key Skills: Software Engineering, Integration, Performance Optimization, JavaScript, Node.js, Salesforce, JIRA

- Owned and optimized release documentation, data dictionaries, data replications, and daily batch & catalog dump algorithms, reducing failures due to database locking by 34%.
- Contributed to the development key features including recommendation engine, search bar and filtering for a Retail B2C E-commerce website using JavaScript, Node.js, ISML, jQuery, and Java on Salesforce Commerce Cloud resulting in a 22% YoY increase in user traffic.
- Optimized site traffic by **decreasing page load time by 25%**, improved CI/CD pipelines, and **automated daily status** reports and data dashboards.
- Worked with product and marketing analytics teams to gather requirements, identify gaps in site tracking, implement data-layer tagging, brainstorm future expansion strategies, maintain JIRA dashboards and take ownership of software go-live release documentation.

Educational Video Production for Data Analytics and Programming

- Developed and produced a series of instructional videos for graduate and undergraduate students, focusing on practical applications of data analytics, data science and software engineering using languages such as R, Python, SQL, and HTML.
- Demonstrated hands-on implementations of **neural networks**, including employing **pre-trained models** from platforms like **Hugging Face**, and utilizing **Power BI for data visualization**.
- Covered a wide range of topics including version control and GitHub, integrating and using website analytics software like Google Analytics, and hosting websites, enhancing the practical knowledge and skills of learners.

Image classification with Deep Learning (Convolutional Neural Networks, ResNet50, Hugging Face)

- Developed & implemented a robust Convolutional Neural Network (CNN) model for image classification with an accuracy of 99.94% and independently compared the results with a pre-trained ResNet50 from Hugging Face.
- Improved model performance through hyperparameter tuning, resulting in a 10% increase in accuracy and a 5% decrease in loss.

Analyzing Life Expectancy using Regression Modeling (R, Feature Engineering, Regression Analysis, Statistics)

- Utilized data engineering and feature engineering to clean & combine datasets from multiple sources, using R
 Studio, inferential statistics, and Tableau Prep Builder to explore, examine and interpret large volumes of data and discern factors contributing to the variance in life expectancy (66.8 to 86.8 years) across U.S. states.
- Conducted **correlation analysis** and identified key variables to assess data integrity, **employed fixed effects and multi-level models** to estimate variable impacts, document processing steps and results, and recommend additional data sources for improvements.

E-Commerce Website Development (E-commerce, Retail, HTML, JavaScript)

- Led end-to-end development of a feature-rich e-commerce website, implementing seamless, user-centric design with Home Page, Product Display, and Landing Pages for optimal customer experience.
- Utilized HTML, CSS, JavaScript, Python, and Flask to create dynamic, responsive webpages and integrated with chart.js for interactive visualizations to effectively communicate analytical results & support business decisions.

EDUCATION

Master of Science in Business Analytics & Information Systems

GPA - 3.93/4

University of South Florida, Tampa, FL

August 2022 – December 2023

TL;DR

Words I'd use to describe myself: Inquisitive. Coachable. Strategic. Curious. Reliable.