Raghav Khurana

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SUMMARY

Experienced data analytics and software development professional with over 5 years of hands-on expertise in data analytics, software engineering, and business intelligence. Proficient in tools like Adobe Analytics, Google Analytics, Tableau alongside programming languages such as R, Python, and SQL. Skilled in applying advanced analytical methodologies to solve intricate business challenges. Demonstrated leadership, collaboration, and project management abilities.

SKILLS

- Analytical Tools: Adobe Analytics, Google Analytics, Tableau, Power BI, QlikSense, SAS E-Miner.
- Programming Languages: R, Python, SQL, Java, JavaScript, HTML, Node.js, Object Oriented Programming.
- Analytical Methodologies: Regression Analysis, Neural Networks, Machine Learning, Supervised/Unsupervised Learning, Clustering, Statistical Modeling, Time-Series Analysis, Classification, Decision Trees.
- Database and Libraries: Oracle SQL, SQLite3, NoSQL, Pandas, TensorFlow, NumPy, SciKit-Learn.
- Visualization Tools: Plotly, Seaborn, Tableau, Power Bl.
- Miscellaneous Tools/Skills: Git, JIRA, MS Office, Jupyter Notebooks, Flask, Matplotlib, Pytorch, Google Cloud, SDLC, Data Visualization, EDA, Statistics, Business Intelligence, Agile Methodology.

EDUCATION

Master of Science in Business Analytics & Information Systems University of South Florida, Tampa, FL

Bachelor of Technology in Electronics & Communications Engineering SRM University, Delhi, India

WORK EXPERIENCE

Data Analytics Teaching Assistant | University of South Florida, Tampa, FL
 Key Skills: R, Statistical Analysis, Regression, Hypothesis Testing, Academic Support

- Facilitated instruction for course "Analytical Methods for Business," guiding 120+ students through advanced statistical techniques and mathematical analyses, including hypothesis testing, confidence intervals, GLM, ANOVA, inferential statistics, and Logistic Regression using R Studio.
- Managed assignment development, grading 50 assignments weekly, and conducted 4+ hours of weekly office hours, offering tailored academic support to technical (Graduate) and non-technical (MBA) student audiences.

Data Warehousing Research Assistant | University of South Florida, Tampa, FL May 2023 – August 2023 **Key Skills:** 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** approach, 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 research and development of the 'Fundamentals of Information Technology' textbook published by Digital Commons @ University of South Florida downloaded over 2000 times.

- Spearheaded end-to-end digital analytics initiatives, employing tools such as **Adobe and Google Analytics** to measure and optimize post-login digital sales, **checkout funnel**, user interaction tracking, and creating performance dashboards.
- 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.

Software Developer (Assistant Systems Engineer) | TATA Consultancy Services, Remote August 2019 – July 2020 **Key Skills:** Software Development, Integration, Performance Optimization, JavaScript, Node.js, 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 'athome.com' using JavaScript, Node.js, ISML, jQuery, and Java on Salesforce Commerce Cloud's resulting in a 22% YoY increase in user traffic.
- Worked on various process improvements for optimizing site traffic based on marketing analytics, focusing on optimizing performance metrics and decreasing page load time by 25%, improving CI/CD pipelines, leveraging AI based recommendation systems, and automating daily custom status reports and data dashboards.
- Supported marketing and customer teams with strategy discussions, ad-hoc JIRA requests, and market research.
- Leveraged data analytics tools to derive insights into user behavior and preferences, thereby informing feature
 development and optimization strategies aimed at positioning a regional e-commerce website to compete with
 industry leaders.

PROJECTS

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.

<u>Predictive Modeling using Time Series</u> (ARIMA, Prophet, Power BI, Tableau)

- Collaborated with business partners to identify opportunities and implemented data science solutions using predictive modeling, statistical analysis, and feature engineering.
- Developed, validated, and executed predictive models using Autoregressive Integrated Moving Averages and Prophet, resulting in a 15% improvement in forecasting accuracy.
- Presented comprehensive past and projected future trends, utilizing **Tableau**, **Power BI**, and **R Studio** for impactful visualizations and storytelling through data.

Analyzing Life Expectancy variation with Statistical Models (R, Feature Engineering, 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.

TL:DR

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