

Raghav Khurana, MS

Chicago, IL (Willing to relocate on my expense) | (656) 200-4963 | [Portfolio](#) | raghavkhurana1@gmail.com | [LinkedIn](#)

SUMMARY

Experienced data analytics and software development professional with over 5 years of hands-on expertise. Proficient in tools like **Tableau, Power BI, and Web Analytics**, alongside programming languages such as **R, Python, SQL, and JavaScript**. Skilled in applying **advanced analytical methodologies** like Regression Analysis and Machine Learning 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, RStudio, 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 Developer, SQLite3, NoSQL, Pandas, TensorFlow, NumPy, SciKit-Learn.
- **Visualization Tools:** Plotly, Seaborn, Tableau, Power BI.
- **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 August 2023 – December 2023

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.

Data/Web Analyst (Systems Engineer) | TATA Consultancy Services, Remote July 2020 – June 2022

Key Skills: Digital Analytics, A/B Testing, Cross-functional collaboration, API Integration

- 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**, and user interaction tracking.
- Leveraged advanced research, analytics, 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 actionable insights to drive business decisions and improve customer satisfaction.

Key Skills: Software Development, Integration, Performance Optimization, JavaScript, Node.js

- **Owned and optimized 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 Home-décor E-commerce** platform 'athome.com' using **JavaScript, Node.js, ISML, jQuery, and Java** on **Salesforce Commerce Cloud's** resulting in a **50% increase in user engagement**
- 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 machine learning and AI based recommendation systems, and **automating daily data & status reports.**
- 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.

Predictive Modeling using Time Series (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.**