Sahil Walia

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EDUCATION

Master of Science in Business Analytics (GPA: 3.78/4.0)   **2024 - 2025**
W.P. Carey School of Business, Arizona State University

Bachelor of Technology - Automotive Engineering   **2016 - 2020**
SRM Institute of Science and Technology, Chennai, TN, India
- **82.12% - First Class with Distinction**

EXPERIENCE

Decision Analytics Associate Consultant - ZS Associates   **Jan 2024 - Jun 2024**
- Developed comprehensive DEICT reporting framework for a global pharmaceutical giant, enabling sponsors to identify demographic representation gaps and improve diverse patient recruitment strategies by 30%.
- Envisioned integrated analytics solutions combining census, real-world evidence, and historical trial data, reducing time for clinical trial design by 20% while enhancing site performance predictions.
- Established automated data pipelines using Python/SQL with quality assurance protocols, achieving 99.9% system reliability and eliminating manual reporting bottlenecks for critical trial milestones.
- Translated complex analytical findings into executive-ready insights, directly informing $50M+ budget allocations and geographic expansion decisions across multiple therapeutic areas.

Decision Analytics Associate - ZS Associates   **Jan 2023 - Dec 2023**
- Created comprehensive brand scorecards for pharmaceutical clients managing $100M+ portfolios, enabling real-time competitive positioning analysis that improved market share by 25%.
- Developed integrated dashboards using Tableau tracking prescription trends, payer dynamics, and HCP engagement across multiple geographies, informing $20M+ investment decisions.
- Built initiative tracking systems monitoring 120+ concurrent projects, reducing status reporting overhead by 60% and enabling early alerts on critical to process insights in risk management for deliverables.
- Recognized with direct client appreciation for delivering solutions that transformed pharmaceutical teams' competitive landscape monitoring and resource allocation strategies.

Business Operations Associate - ZS Associates   **May 2021 - Dec 2022**
- Designed clinical trial monitoring and audit readiness solutions, improving risk identification capabilities by 50% and reducing regulatory preparation timelines from weeks to days.
- Created comprehensive tracking systems for major pharmaceutical client's oncology portfolio transition, monitoring 110+ R&D initiatives and providing executive visibility into $75M+ development pipeline.
- Implemented standardized data management protocols and automated reporting frameworks using Excel/VBA and Tableau, reducing manual effort by 30% while improving data accuracy.
- Contributed to multiple proof-of-concept projects that evolved into long-term client engagements, demonstrating business value of innovative analytics approaches in clinical operations.

ACADEMIC PROJECTS

- **Breast Cancer Detection Using Explainable AI (Dec 2025 - Present):** Trained YOLOv8 detection models on 5,000+ mammograms achieving 85% (class specific) accuracy. Applied Explainable AI (Grad-CAM, LIME, SHAP) to enhance interpretability for clinical stakeholders.
  Harley-Davidson Capstone - AI Sentiment Analyzer (Jan 2025 - May 2025): Built RoBERTa-based NLP pipeline analyzing 100K+ social media comments across Reddit/YouTube platforms. Delivered executive dashboards surfacing brand perception, presented to Harley-Davidson CIO and global executive team.

SKILLS

- **Business Intelligence & Data Visualization:** Tableau (Advanced), Power BI, Looker Studio, Excel (Advanced), MS Office Suite, KPI Design, Business Intelligence Frameworks, Data Warehousing, Data Modeling
- **Data Engineering & Programming:** SQL (Snowflake, Postgres), Python (pandas, NumPy, scikit-learn), PySpark, ETL/ELT Pipelines, Git, VBA
- **Machine Learning & AI:** Machine Learning, Predictive Analytics, PyTorch, YOLO (Computer Vision), Natural Language Processing (NLP), Grad-CAM, AI Workflows, GenAI, LIME
- **Cloud & Platforms:** AWS (SageMaker, Comprehend Medical), Azure Data Fundamentals, Google Cloud Intelligence
- **Statistical & Analytical Methods:** Statistical Analysis, Statistical Modeling, Process Improvement, Data Engineering, A/B Testing
- **Healthcare & Clinical Analytics:** Healthcare Analytics, Clinical Trials, Risk-Based Monitoring (RBM), ICH-GCP

CERTIFICATIONS

- Google - Foundations of Business Intelligence, Coursera - 2025
- IBM - AI Foundations for Everyone, Coursera - 2025
- Tableau Certified Data Analyst, Salesforce - 2023