Sahil Dadhwal

(707) 863-2820 | sahildadhwal2001@gmail.com | linkedin.com/in/sahildadhwal | Fairfield, CA

Technical Skills

Data Visualization & BI: Power BI, Dashboard Development, Ad-Hoc Reporting, Data Storytelling
Data Engineering: SQL, ETL/ELT Pipeline Development, Data Modeling, Data Quality Frameworks, Data Validation
Databases & Warehousing: Snowflake, SQL Server, PostgreSQL, MongoDB, Schema Design
Tools & Platforms: Python (pandas, NumPy), Jenkins, Docker, Git, CI/CD, REST APIs

Experience

Data Engineer (Contractor) April 2024 – Present
BTIS *Sacramento, CA*

- Designed and implemented production ETL pipelines processing 15+ GB datasets from 50+ MongoDB collections to SQL Server data warehouse, reducing data inconsistencies by 90%
- Architected data warehouse solutions optimized for complex analytical queries, enabling business intelligence reporting and executive-level strategic decision-making
- Built comprehensive data quality framework with validation rules processing 2M+ weekly records for WCPOLS compliance, ensuring data correctness and regulatory adherence
- Developed 50+ ad-hoc Power BI dashboards and reports leveraging Snowflake data warehouse, responding to stakeholder requests and delivering real-time analytics to CTO and executive leadership
- Designed end-to-end CI/CD pipeline using Jenkins, Vault, and Orkes Conductor, automating ETL deployment across 3+ environments with containerization and scheduled orchestration
- Led cross-functional coordination among 15+ stakeholders across 8 critical data migration projects, translating business requirements into technical data models and documentation

Business Operations Manager June 2023 – April 2024
Thakur Inc. *Fairfield, CA*

- Managed end-to-end retail operations including inventory management, vendor coordination, staff scheduling, and bookkeeping for a family-owned convenience store
- Built Google Sheets systems to track inventory levels, daily sales, profit margins, bank deposits, and delivery invoices, enabling data-driven purchasing decisions
- Coordinated with 10+ vendors to maintain supply chain consistency, reconcile invoices, and resolve delivery discrepancies

Technical Projects

Dimensionality Reduction for Image Classification | *PyTorch, Deep Learning* Oct. 2025 – Dec. 2025

- Built end-to-end ML pipeline processing high-dimensional image data (3072-D to 512-D), conducting comparative analysis across 12 experimental conditions with multiple classifier architectures

Bird Species Distribution Tracker | *Python, FastAPI, MongoDB, React, GIS* April 2025 – May 2025

- Architected data pipeline processing 5M+ geospatial observation records from GBIF and PRISM climate APIs, designing scalable data models for multi-gigabyte datasets
- Built FastAPI backend with MongoDB for efficient storage and retrieval of complex geospatial data, implementing real-time filtering and query optimization
- Designed React frontend with interactive geographic heatmaps and seasonal analysis visualizations across 10+ North American species

AI Toxicity Detection in Developer Communities | *Python, BERT, NLP* Jan. 2025 – March 2025

- Processed and analyzed 1M+ interactions from GitHub Archive data, implementing data pipelines for large-scale repository metrics and commit pattern extraction
- Conducted statistical analysis (Spearman/Pearson correlations) to derive actionable insights from complex multi-dimensional datasets on developer productivity

Education

University of California, Davis Sept. 2024 – June 2027 (Expected)
Master of Science in Computer Science *Davis, CA*

University of California, San Diego Sept. 2019 – June 2023
Bachelor of Science in Computer Science — A.S. in Applied Mathematics & Economics *San Diego, CA*