Sahil Dadhwal

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

EDUCATION

University of California, Davis

Master of Science in Computer Science

Sept. 2024 – June 2027 (Expected)

Davis, CA

Sept. 2019 – June 2023

University of California, San Diego

Bachelor of Science in Computer Science — A.S. in Mathematics & Economics

San Diego, CA

TECHNICAL SKILLS

Languages: Python, SQL, Java, JavaScript, C++, HTML/CSS

Data Engineering: ETL/ELT, Data Modeling, MongoDB, PostgreSQL, SQL Server, Snowflake, Power BI, Tableau

Machine Learning: scikit-learn, BERT, NLP, Statistical Analysis, Predictive Modeling, GIS

Tools & Frameworks: Jenkins, Docker, Vault, Orkes Conductor, Git, pandas, FastAPI, React, REST APIs, CI/CD

EXPERIENCE

BTIS

Data Engineer Intern

April 2024 – Present

Sacramento, CA

- \bullet Engineered Python ETL pipelines processing 15+ GB datasets from 50+ MongoDB collections to SQL Server, reducing data inconsistencies by 90%
- 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, ensuring 100% on-time delivery of 8 critical data migration projects
- Developed 50+ Power BI dashboards for CTO and business executives using Snowflake data warehouse, supporting \$10M+ in strategic data-driven decisions
- Built comprehensive data validation framework and architected WCPOLS compliance solution processing 2M+ weekly records
- Served as BTIS's first intern, where after 3 months of consistent high level performance led CTO to expand program and hire 5 additional interns

Team Lead

June 2023 – April 2024

Dixon, CA

First Northern Bank

- Recognized by CEO & head of HR for exceptional customer service and commitment to client satisfaction
- Led team of 8+ employees, implementing training program that reduced onboarding time by 40% while improving performance by 25%
- \bullet Conducted risk assessments for transactions up to \$2M and created operational dashboards, reducing processing errors by 30%

TECHNICAL PROJECTS

Bird Species Distribution Tracker | Python, React, FastAPI, MongoDB, ML, GIS

April 2025 – May 2025

- Built full-stack dashboard analyzing 5M+ bird observation records to visualize climate change impact on species migration patterns using GBIF and PRISM climate APIs
- Implemented ML forecasting models predicting future species distribution shifts with interactive geographic heatmaps and seasonal analysis visualizations
- Architected FastAPI backend with MongoDB for processing multi-gigabyte geospatial datasets and React frontend with real-time data filtering across 10+ North American species

AI Toxicity Detection in Discussions | Python, BERT, APIs, Statistical Analysis Jan. 2025

Jan. 2025 – March 2025

- Analyzed correlation between toxic communication and developer productivity across GitHub repositories using GitHub Archive data and Incivility Dataset with 1M+ interactions
- Implemented BERT-based toxicity detection model with API rotation system processing repository metrics, commits, and issue resolution patterns
- Conducted statistical analysis (Spearman/Pearson correlations) revealing significant relationships between communication patterns and project outcomes