JOSEPH S. HERNANDEZ
DATA ENGINEER | DATABASE ADMINISTRATOR

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PROFESSIONAL SUMMARY

Data professional and Military Veteran with 24 years of proven experience in supply chain analytics and information technology. A technical problem solver with comprehensive knowledge in database administration, system administration, data quality, and data management. Record of success improving logistics and supply chain operations by combining technical expertise with data insights to drive process improvement and managerial decisions. Fast learner who quickly grasps and adapts to new concepts, technologies, and settings.

SKILLS

- **Clearance**: Active Secret Clearance (TS/SCI Eligible)
- **Databases**: PostgreSQL, MSSQL, MySQL, Sybase, BiqQuery, RedShift, Cloud SQL
- **Python**: Pandas, Numpy, Sklearn, Keras, TensorFlow, Psycopg2, SQLalchemy, Petl, loguru
- **R**: dplyr, tidyr, lubridate, gmap, caret, olsrr, Hmisc, sqldf
- **Scripting**: Bash, Python
- **Frameworks**: Django, Flask, Spfx
- **CI/CD**: Docker, Jenkins
- **ETL**: Databricks, SSIS, DataFlow, Glue
- **Version Control:** Git, GitHub, GitLab
- **Cloud**: Google Cloud, AWS, MS Power Platform
- **Visualization**: Tableau, PowerBI, matplotlib, pyviz, ggplot, ggmap
- **Soft Skills**: Leadership, Time Management, Problem Solving, Adaptability, Customer Support, Communication

EDUCATION

- **Master of Science, Data Science** | Eastern University, St. Davids, PA – 2023 (June)
- **Bachelor of Science, Accounting** | University of Maryland, Global Campus – 2022

PROJECTS

- **AWS Data Warehouse:** Built a Redshift data warehouse using boto3 and redshift_connector to create and run all cloud services required from python (IAM, VPC, Athena, Glue, Tableau).
- **Airflow Data Copier:** Created a custom ELT pipeline that automates and logs the loading of JSON data to a MySQL database then extracts and loads data into a Postgres database using docker containers and Airflow for automation.
- **Star Wars Community Network**: Utilized SpaCy NLP tools to train a custom Named Entity Recognition Model (NER) to identify and visualize community networks and relationships from the original Star Wars Trilogy.
- **Python CLI ETL Program**: Developed a Python CLI program to extract data based on customer response and return data in specified format (json, csv, xml) for use in analytic and machine learning projects utilizing argparse and pyodbc.

PROFESSIONAL EXPERIENCE

Naval Information Warfare Center – San Diego, CA   **August 2018 – Present**
Database Systems Administrator
- Provided technical customer support for 30 Red Hat Linux servers and 60 databases to 15,000+ users.
- Resolved over 4,000 trouble tickets related to networking, server configuration, data pipelines, and database stored procedures minimizing system downtime and maintaining 99.97% operational readiness.
- Automated 65 trouble ticket resolutions utilizing Python, Bash, and SQL reducing ticket closure time by 36%.
- Led 36 large scale database server upgrade and data migration projects leading to enhanced system security and capabilities for 355 aviation logistics units across Naval Aviation Enterprise.
- Developed 3 ETL pipelines based on stakeholder requirements eliminating 500+ man hours of manual processing.
- Conducted 25 executive level briefs on software implementation benefits, project scopes, timelines, and status.

United States Marine Corps – MCAS Beaufort, SC   **April 2015 – August 2018**
Supply Chain Analyst
- Scripted a python program to identify and correct data inconstancies enabling accurate weapon system classification and improved analytics.
- Built SSIS ETLs to ingest transactional data sets for 14,580 inventory line items from 6 databases to aid in analysis and support stock posture changes yielding a critical component fill rate of 95%.
- Created 2 data warehouses (AWS Redshift, MSSQL) providing senior level management quick visibility of KPI's, metrics, and dashboards reducing time required to obtain information by 50%.
- Initiated a data pipeline that collected, cleansed, and analyzed support package requirements yielding a deployment support order fill rate of 85% over a three-year period.
- Streamlined reverse logistics processing of non-repair components using machine learning algorithms, cluster analysis, and various regression models reducing processing time by 16 hours.

United States Marine Corps – Atsugi, Japan   **March 2013 – April 2015**
Air Logistics Cost Analyst
- Devised 25+ custom reports and database views using SQL, Python, MS Excel, and Tableau.
- Developed and implemented a Power BI based data model that automated cost analysis and visualized various metrics reducing processing time by 48 hours and providing $4 Million in cost savings over two years.
- Constructed reusable scripts for data wrangling improving business process completion time by 10%.
- Planned and coordinated air cargo movement for over 200 Navy Air Logistics Office flights facilitating the movement of 500,000+ pounds valued at $400 Million.

United States Marine Corps – Camp Pendleton, CA   **April 2011 – March 2013**
Database Analyst
- Developed an application to automate required procedures for reviewing systems access and user roles within on-premise databases, resulting in savings of over 140 billable hours per year.
- Scripted a Python CLI program to identify and prevent errors when loading data from external sources into on-premise database, reducing data loss by over 95%.
- Created data visualization dashboards for monitoring inventory and procurement performance, tracking customer wait times, and identifying bottlenecks in component repair cycles.
- Wrote SQL queries and views that improved database integrity, streamlined inventory management, and eliminated wasted man-hours on tedious, repetitive tasks.

United States Marine Corps – MCAS Beaufort, SC   **May 2008 – April 2011**
Database Administrator
- Conducted analysis utilizing SQL and MS Excel to extract insights on 20 critical bit piece parts creating production and repair work stoppage enabling increased parts procurement and a 10-day turnaround time improvement.
- Identified 100+ database errors and corrected them utilizing DDL, DML, DCL, and TCL SQL commands.
- Created a Python ETL program to analyze audit requirement validation resulting in 100% score on all internal and external audits.

CERTIFICATIONS | TRAINING
Google Data Analytics Professional Certificate | Google
Databricks Lakehouse Fundamentals | Databricks
Lean Six Sigma Green Belt | Naval Aviation Enterprise
Google Data Professional Data Engineer | In Progress