Carter K. Richard

131 Tarrytown Trail, Longwood FL 32750

321-578-7396 | carter@calcifer.cloud | inkcartrich | carterkrichard

Experience

GCP Data Engineer
Remote

66 Degrees, LLC
January 2022 - May 2023

- Named Data Services MVP in November of 2022 for outstanding work in retaining a mission-critical client from the logistics industry.
- Led a team of 3 technical personnel in developing architecture and supporting documentation for an awarded solution proposal.
- Independently sought and achieved certification as a GCP Professional Data Engineer & Professional Machine Learning Engineer.

Data Analyst
Remote

Deloitte Consulting, LLP
June 2020 - December 2021

- Implemented a RESTful API endpoint to enable enhanced reporting at the Department of Homeland Security (DHS-PARM)
- Designed and deployed a PowerBI tenancy for real-time financial insights over approximately $1.2M in federal appropriations.
- Conducted continuing education classes for Deloitte 'Community of Practice' cohorts in advanced data visualization using R.

Clinical Engineer
Orlando, FL

AdventHealth
May 2019 - May 2020

- Delivered on-call technical troubleshooting and repair services to clinical staff, including emergency and surgical equipment.
- Identified and located over 500 medical infusion pumps with a misconfigured networking interface using applied data analysis.
- Developed and deployed a business intelligence dashboard for medical device maintenance supporting over 10K active assets.

Education

Rollins College
Winter Park, FL

B.A. in Physics, Minors in English & Music
August 2013 - May 2018

Research in acoustic signal analysis, visualizing and modeling the mechanical properties of oscillatory motion in musical instruments.

Portfolio

hermes: Quantized LLM textual inference to power locally-hosted AI-enabled Discord bots at low/no-cost to end-users.

sabacc: Applied Monte Carlo analysis and game theory to determine the optimal playing strategy for a card game from 'Star Wars'.

vex-mythoclast: Web-scraping over 1M users to reverse-engineer an online video-game service's database and predict rare item drop rates.

Proficiencies

Google Cloud Platform — BigQuery, BigTable, VertexAI, GCE, GKE, GCS, Cloud SQL, Pub/Sub Dataflow, DataProc, DataPlex

Large Language Models — GPT, LLaMA, Mistral, LangChain, LlamaIndex, RAG, pgvector, LoRA/QLoRA, open-source models, local inference

SWE Tools & Frameworks — Snowflake, Terraform, Apache Spark, Docker/Kubernetes, NoSQL, Git, PowerBI, Tableau, Flask, Jupyter

Coding Languages — Python (Pandas, NumPy), R, Go, C#, SQL (CloudSQL/SnowSQL/PostgreSQL), Swift/SwiftUI, HTML/CSS

Data Engineering — Extract-Transform-Load (ETL), data modeling, pipeline development, machine learning (esp. MLOps)

Data Analysis — Exploratory Data Analysis (EDA), linear modeling, time-series forecasting, cluster analysis, data visualization

Accreditations

Google Cloud Platform

Certified Professional Data Engineer, Certified Professional Machine Learning Engineer
March 2020 - Oct 2024

Constitutes extensive understanding (3+ YOE) of GCP data services, especially in the architecture, implementation, management, and cost-optimization of production-ready data processing services and machine learning models equipped to securely operate at scale.

Snowflake

Hands-on Essentials: Data Warehousing, Data Application Builder, Data Engineering
November 2023

Demonstrates capabilities using SnowSQL, the Snowflake Cloud, ETL & DBMS tools, and webapp framework integration (such as Streamlit).

Activeloop (in collaboration with Intel & TowardsAI)

GenAI 360 - Large Language Models & Vector Databases in Production
October 2023

Demonstrates advanced understanding of Generative AI tools and techniques: OpenAI, LLMs, LangChain, retrieval-augmented generation (RAG).

Professional references available by request.