

Wen Gong

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SUMMARY

- 13+ years of enterprise software development leadership
- 2+ years of hands-on GenAI solution development with proven track record of delivering multi-million dollar business impact through innovative data solutions and self-service analytics
- 5+ years AWS cloud expertise with certified developer credentials
- 4+ years front-end experience building data app using streamlit
- Multiple years of physics research at 3 national laboratories
- Strong analytical, problem-solving, collaborative, and communication skills.

EXPERIENCES

Vanguard Group: Data Engineer (IV) Jan 2023 – Present

- Led GenAI initiative using AWS Bedrock, including delivering webinars and building RAG applications for self-service analytics
- Conducted comprehensive LLM model benchmarks (GPT-4, Claude-3.5, Qwen2.5, Llama-3) for Text2SQL applications
- Built an innovative data solution which enabled Fraud team (100+ analysts) to achieve \$11.2M savings
- Modernized a BI dashboard using python and SQL to achieve over \$1M savings
- Delivered enterprise-wide data solutions for DevOps (DORA metrics, GitHub, CI/CD pipelines)

Vanguard Group: Senior Cloud Data Engineer Apr 2019 – Dec 2022

- Built various Glue ETL jobs to ingest/transform IT360 data and Genesys cloud call transcript
- Designed/built data product to transcribe call recordings to improve call center operation efficiency.
- Designed/built serverless app for real-time data capture using AWS to replace vendor product.
- Use REST APIs to ingest employee role provision data.
- Designed/built end-to-end data pipelines to analyze interactions, gain insights into client experiences.

Insight Data Science: Data Engineering Fellow Jan 2019 – Mar 2019

- Completed an AWS boot-camp with a successful capstone project.

Oracle Corp: Principal Consultant, Lead Software Engineer Jan 2006 – Jan 2019

- Designed database models, built application backend in SQL and PL/SQL
- Designed/built/supported various integration solutions for front-end CRM and back-end order systems using real-time web service, daily batch jobs to cleanse, de-duplicate, match, enrich and transform customer data to improve data quality.
- Designed/built Customer Master solutions for clients like Oracle, UMB Bank, Toyota, GE.
- Built infrastructure to integrate Customer Relationship Management (CRM) with back-office
- Designed/built a patented product catalog with automatic generation of data models and user interfaces (US20030004971A1)

PROJECTS

- Data copilot: RAG app to enable analyst to chat with data (<https://github.com/gongwork/data-copilot>)
- Vanna.ai fork (<https://github.com/wgong/ssadata>)
- GenAI webinar (<https://www.slideshare.net/slideshow/introduction-to-genai-past-present-future/273565748>)

TECHNICAL SKILLS

AI/ML	LLMs, RAG, Text2SQL , LangChain, ChromaDB, Ollama
Cloud/Infrastructure	AWS (Glue, Athena, Lambda, ECS, S3, EMR, SQL/SNS), Docker, CI/CD tools, Linux, Windows, Jupyter Notebook
Language	Python , SQL , Node.js, Shell scripting
Database	PostgreSQL, Oracle, DynamoDB, DuckDB, SQLite
Certification	AWS Certified Developer Associates (# MJ88QEJ1HF1111C0), Databricks Certified Associate Developer for Apache Spark 3.0 (# 2207267)

EDUCATION & RESEARCH

PhD in Nuclear Physics	Michigan State University research at National Superconducting Cyclotron Lab; post-doc researcher at Lawrence Berkeley National Lab and Max Planck Institute for Physics at Munich;
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