**Wen Gong**919-931-5513 [w](https://www.linkedin.com/in/wen-g-gong/)en\_gong@vanguard.com

**SUMMARY**

* 13+ years of enterprise software development leadership
* 2+ years of hands-on GenAI solution development with proven track record of delivering $12M+ 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 nuclear physics research at 3 national laboratories in USA and Germany
* Strong analytical, problem-solving, collaborative, and communication skills.

**EXPERIENCES**

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| **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)

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| **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.

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

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

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| **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**

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| **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**

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| **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; |