

SHISHIR TIWARI

Full Stack Developer | AI Engineer | Database Architect

PROFESSIONAL SUMMARY

Highly accomplished **Full Stack Developer & AI Engineer with 22+ years of experience (2003–Present)** in database engineering, backend development, and AI-driven systems. Expert in SQL and PL/SQL with deep hands-on experience in designing, debugging, optimizing, and validating complex production-grade stored procedures and database logic.

Strong command over relational architecture, control flow mechanisms, and schema interpretation including Snowflake-style data models. Proven ability to translate complex business logic into precise SQL/PLSQL solutions and generate structured natural-language prompts aligned with accurate code outputs.

Extensive experience in AI benchmarking, NL2CODE validation, structured test-case development, and reviewing AI-generated database solutions for correctness, efficiency, and logical consistency. Recognized for strong analytical reasoning, structured thinking, and strict adherence to technical guidelines.

CORE EXPERTISE

- 22+ Years in Database & Backend Engineering
- Advanced SQL & PL/SQL (Oracle & Snowflake)
- Stored Procedure Architecture & Optimization
- Complex Query Tuning & Performance Enhancement
- Database Logic & Control Flow Engineering
- Snowflake / Normalized Schema Interpretation
- AI Prompt Engineering (SQL & PL/SQL Generation)
- NL2CODE Evaluation & Benchmarking
- Single-turn & Multi-turn Interaction Design
- Structured Test Case & Metadata Creation
- Code Review, Debugging & Validation
- Schema Design & Data Modeling
- Production System Development

PROFESSIONAL EXPERIENCE

Full Stack Developer / AI Engineer

Abacus Consultancy Services (I) Pvt. Ltd.

India | 2003 – Present

Key Contributions & Achievements

- Architected and maintained enterprise-level **SQL & PL/SQL solutions** including stored procedures, packages, functions, and triggers in production environments.
- Led debugging and performance optimization initiatives for complex PL/SQL systems handling large datasets.
- Designed scalable database logic using structured control flow constructs and relational best practices.
- Interpreted and worked with complex schemas including Snowflake-style architectures and normalized database designs.
- Developed precise natural-language prompts aligned with accurate SQL/PLSQL outputs for AI-driven systems.
- Created comprehensive structured test cases with metadata for validating database logic and AI-generated code.
- Evaluated and reviewed AI-generated SQL/PLSQL solutions to ensure syntactic accuracy, logical correctness, and edge-case handling.
- Designed single-turn and multi-turn interaction workflows for structured AI benchmarking systems.
- Contributed to backend system design ensuring reliability, scalability, and maintainability.
- Mentored junior developers on database best practices and structured coding standards.

TECHNICAL STACK

Databases

- Oracle Database
- Snowflake
- MySQL
- PostgreSQL

Languages

- SQL
- PL/SQL
- Python
- JavaScript

Backend & Architecture

- REST APIs
- Data Modeling & Schema Design
- Stored Procedures & Triggers
- Query Optimization
- Control Flow Logic Engineering

AI & Evaluation Systems

- Prompt Engineering
- NL2CODE Systems
- AI Benchmarking
- Code Validation & Evaluation Frameworks
- Structured Metadata Design

EDUCATION

Master of Science (MS), Computer Science

Florida State University

August 2001 – June 2003

Bachelor of Engineering (BE), Electronics

Devi Ahilya Vishwavidyalaya

1995 – 1999

PROFESSIONAL STRENGTHS

- Strong logical reasoning & analytical mindset
- Detail-oriented with strict compliance to structured guidelines
- Excellent written English communication skills
- Proven experience in production database environments
- Ability to convert complex requirements into optimized database logic

DECLARATION

I hereby declare that the information furnished above is true and correct to the best of my knowledge.

Shishir Tiwari