

Billy Wookyoung Hong, OCP, PMP

Proven Database & AI-Augmented Development Expert · Python · AWS · Oracle · SQL Server

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SUMMARY

Certified and experienced Database Developer with extensive expertise in OLTP/OLAP systems, MIS, ERP, Toll Processing, healthcare, Oracle PL/SQL, and MS SQL Server. Proven problem solver and leader with a deep understanding of technology and diverse certifications. Actively integrating AI tools (GitHub Copilot, AI coding agents) into daily development workflows, and completed a rigorous 100+ hour AI/ML training program at Bank of America — demonstrating a strong commitment to AI-driven modernization.

EXPERIENCE

Dexian (on assignment at Bank of America)

Software Engineer — Python & AI / Database Specialist

April 2025 – Present · Plano, TX

AI-AUGMENTED ENGINEER | Completed Bank of America's internal **AI/ML Training Program (100+ hours)** — Certified in Applied AI/ML at Enterprise Scale. Integrates **GitHub Copilot and AI coding agents** as core daily development tools.

Core Responsibilities

- **AI-Accelerated Development:** Architect, develop, and maintain Python modules using GitHub Copilot within PyCharm; leverage AI-driven code completion to accelerate boilerplate generation, logic implementation, and code review — consistently cutting delivery time.
- **AI-Assisted Database Engineering:** Design and optimize complex database applications using SQL, T-SQL, and PL/SQL; deploy AI agents to refactor queries and ensure high-performance compatibility across Oracle and SQL Server.
- **Systems Analysis & AI Documentation:** Collaborate with stakeholders to define business requirements; use AI tools to auto-generate functional and technical specifications, 'as-is' and 'to-be' process documents.
- **Full-Cycle SDLC & AI-Powered Testing:** Lead end-to-end application design; use Copilot to write test code, automate testing procedures, and monitor system upgrades and patches.
- **Rapid AI-Aided Troubleshooting:** Diagnose and resolve high-priority issues in fast-paced environments; use IDE-integrated AI tools to debug Python-to-database connectivity and resolve performance bottlenecks.
- **Legacy Modernization:** Upgrade existing applications with modern Pythonic standards and AI-suggested optimizations to legacy codebases.

Technical Profile

- Development: PyCharm · GitHub Copilot · AI Coding Agents
- Languages: Python · SQL · T-SQL · PL/SQL
- Databases: Oracle · Microsoft SQL Server
- Methodology: Full SDLC · Business Process Mapping · Automated Testing

JPMorgan Chase & Co.

Software Engineer — Data Technology

September 2020 – April 2025 · Plano, TX

- Orchestrated and managed daily ETL jobs using Control-M.
- Ingested and validated data using Python, Spark, and Hadoop.
- Maintained data quality and metadata using REST APIs.
- Migrated ETL processes from Hortonworks to AWS Glue.
- Monitored and troubleshoot ETL processes; designed new data ingestion pipelines.

Vizient, Inc.

Application Developer — ETL

April 2019 – September 2020

- Developed and maintained ETL applications in Oracle PL/SQL for efficient data flow.
- Ensured data accuracy and compliance with healthcare regulations.
- Built and maintained Oracle Apex applications for efficient master data management.

Ansira

Senior Database Developer

July 2017 – April 2019 · Addison, TX

- Developed and maintained ETL processes using SQL Server and PL/SQL; utilized SSIS for data integration.

- Provided production support for marketing databases; integrated ETL with SAS for advanced analytics.

Electronic Transaction Consultants

Senior Database Application (PL/SQL) Developer

June 2012 – June 2017 · Richardson, TX

- Back-end development for toll industry solutions integrating lane-to-back-office and customer service.
- Designed Oracle Stored Procedures, Functions, Triggers; conducted relational data modeling (ERDs).
- Developed PCI-compliance data conversion scripts; utilized Oracle Advanced Queues for high availability.

Ericsson

Database Analyst / Developer

November 2011 – May 2012 · Plano, TX

- Oracle PL/SQL development, Perl scripts, DDL scripts, MySQL, PostgreSQL, and Java web applications.

Samsung SDS America

System Analyst / Developer

August 2008 – November 2011 · Richardson, TX

- Maintained three-tier client/server system for Samsung Telecom America service line processing.
- Developed UI in PowerBuilder; back-end in Pro*C and Oracle procedures; Java-based EDI file processing.

LG Electronics

System Analyst / Developer

April 2004 – July 2008 · Englewood Cliffs, NJ

- Maintained ERP client/server system (sales module & EDI interface); performance-tuned slow SQLs.
- Developed back-end logic in Oracle PL/SQL; controlled batch jobs via UNIX scripts and Crontab.

Samsung SDS Korea

System Analyst / Developer

March 1998 – April 2002 · Seoul, Korea

- Maintained document approval system; JSP/Servlet in Weblogic; Pro*C back-end; Java EDI processing.

EDUCATION

Hanyang University

Bachelor's Degree, Urban Engineering

1991 – 1998

CERTIFICATIONS & TRAINING

- **Bank of America AI/ML Training Program · 100+ Hours · Applied AI/ML at Enterprise Scale (Completed)**
- Oracle Database 11g Administrator Certified Professional (OCP)
- Oracle Advanced PL/SQL Developer Certified Professional
- Microsoft Certified Solutions Associate (MCSA)
- MongoDB Python Developer Path
- Python Programming Certificate
- Project Management Professional (PMP)

TOP SKILLS

AI Tools: GitHub Copilot · AI Coding Agents · Applied ML/AI (BOA Certified, 100+ hrs)

Cloud & Big Data: AWS Glue · AWS S3 · Spark · Hadoop · Hortonworks

Databases: Oracle · Microsoft SQL Server · MySQL · PostgreSQL · MongoDB

Languages: Python · PL/SQL · T-SQL · SQL · Perl · Java · Pro*C · Shell/Bash

ETL & Integration: Control-M · SSIS · REST APIs · SAS · Oracle Apex

Methodology: Full SDLC · Agile · Data Modeling · Business Process Mapping

ONLINE PROFILES

LinkedIn: [linkedin.com/in/billy-wookyoung-hong-ocp-pmp-58b39735](https://www.linkedin.com/in/billy-wookyoung-hong-ocp-pmp-58b39735)

GitHub: github.com/hongwk2001

Technical Writings (tkprof): jigsawpuzzlehelper.com/doku.php?id=99.tkprof