MICHAEL SHAWN LOCKWOOD

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PROFESSIONAL RÉPERTOIRE

My foundation in SQL Server and T-SQL development spans two decades. I specialize in performance, scalability, and automation engineering across the full data lifecycle. I design and build complete data pipelines—from raw sources such as Parquet, CSV, and PSV—through database design, development, and optimization now in Databricks, SQL Server, and PostgreSQL, all the way to analytics and visualization in Power BI and D3.js. My work spans on-prem. and cloud-aligned environments, including Azure and Databricks, where I also experiment locally with Azurite and MinIO to emulate real-world cloud architectures for Delta Lake and object-storage integration. Though I can build APIs and UX layers, my strongest impact is in the data tier, where design and performance converge.

I'm a highly motivated and naturally curious professional who takes pride in understanding how every layer of data architecture fits together. Whether examining execution plans, tightening indexes, or refining data flows, I approach every challenge with a performance-first, automation-second mindset. I value precision, reliability, and transparency—traits that have defined my success across healthcare, finance, and hospitality systems for more than two decades.

I began with Microsoft Access while in college nearly 30 years ago. Naturally, I migrated to SQL Server using Microsoft's Data Transformation Services (DTS) and earned my MCDBA certification in 2006. SQL Server, T-SQL, and SSIS form the foundation of my career. I also hold a Bachelor's degree in Business Administration from DeVry University.

For additional background, project and code examples, visit my GitHub Pages and LinkedIn.

TECHNICAL SKILLSET

Core Database Expertise
- **Transact-SQL (T-SQL)** – advanced development, performance optimization, and automation
- **SQL Server Integration Services (SSIS)** – ETL, data migration, and process automation
- **SQL Server Reporting Services (SSRS)** – reporting, analytics, and dashboard delivery
- **SQL Server Data Tools (SSDT)** in Visual Studio; daily development in **VS Code**
- **Databricks SQL**

High Availability & Disaster Recovery (HADR)
- Installed, configured, and managed **Always On Availability Groups**, **Windows Server Failover Clustering (WSFC)**, and **Log Shipping** in production

Performance & Security
- Many thousands of hours in **query tuning, indexing strategies, and partitioning**
- Implemented **Extended Events, Resource Governor, SQL Trace, and SQL Audit** for performance and compliance

Automation & Orchestration
- Designed **automated solutions** using T-SQL and SSIS; experience with **PowerShell** and **Python** scripting
- Built pipelines and workflow orchestration using **Airflow**; analytics with **Databricks**; visualization in **Power BI**

Platforms
- **SQL Server** (7.0a–2019, building 2022 lab), **PostgreSQL**, **Azure SQL**, SQL Server on **AWS and Azure VMs**, **GitHub**, **Hyper-V**, **Oracle VirtualBox**, **Docker**/Dev Containers, **Linux** (**Debian**/**Ubuntu**)

Application & API Collaboration
- Partnered with development teams on **C#,** and **ASP.NET Core** solutions
- Hands-on with **API design and testing** (REST, OData, Postman, Identity Server) to improve integration between application and database tiers

PROFESSIONAL EXPERIENCE

Independent Project Work | Data Engineering & Database Development

2021 – Present

- Once Walmart Health's acquisition of MeMD finalized in June 2021, I took the opportunity to further my education, informally, and expand my knowledge and experience in modern and emerging data engineering technologies. I've self-directed my projects and development work. One outcome is a multi-billion row public data engineering pipeline focused on large-scale data ingestion, validation, and analytics across SQL Server, PostgreSQL, Azure, and Databricks, separately for a number of reasons. I use Python and PowerShell for converting and merging Parquet files into PSV files (and back), then bulk import into relational tables, and write Delta Lake tables to the blob storage that backs Databricks SQL Warehouse — extensions make Parquet file conversion largely unnecessary because of Parquet format adoption, but it's good to know. For local development I reduce Parquet file size using Bernoulli probabilistic sampling. I use GitHub and VS Code for development and version control. I use Airflow and Python to orchestrate repeatable pipelines, while Databricks supports heavy lifting, and DBX is sleek. I document and publish my work and progress in my GitHub Pages.
- I've worked in slow, moderate, and fast-paced environments for many years, mostly in healthcare and transaction-heavy industries as a Senior DBA. I'm a firm believer in mastering core platforms and technologies rather than a generalist—still, I've taken time to learn and experiment with a variety of tech: **PostgreSQL**, **Python**, **PowerShell**, **JavaScript**, **Jupyter**, **Airflow**, **Databricks SQL, Notebook, and Dashboards**, **Power BI**, **D3.js**, **Hyper-V**, **VirtualBox**, **Docker**, **ASP.NET Core**, **Identity Server**, **Node.js**, **Angular**, **CSS/Sass**, and even **MongoDB**. *This is more than a laundry list of tech*. These explorations help me stay adaptable and give me perspective, many of which I use in my recurring development and deployment cycles as part of my **professional roadmap**.

Senior SQL Server Database Administrator / Developer

MeMD (Acquired by Walmart Health June 2021) — Jan 2018 – Jun 2021

- Engineered a complex, automated file-ingestion pipeline to retrieve, decrypt, parse, transform, and process member data files from enterprise clients—reducing processing time from two business days to under ninety minutes, minimizing manual intervention, and eliminating the instability of long-running, memory-intensive workflows.
- Technologies: SQL Server (on AWS), SQL Server Integration Services (SSIS), T-SQL, Visual Studio Code, and Python.
- Developed and maintained stored procedures, functions, and other data-access components in SQL Server (hosted on AWS).
- Monitored SQL Server for performance degradation and tuned data-access logic and indexes accordingly.
- Collaborated with the DevOps team to align data processes and deploy database changes in support of the CI/CD pipeline.

SQL Database Developer

ProKarma / InEight — Oct 2017 – Feb 2018

- Built a proof-of-concept integrating **SQL Server Views**, **OData endpoints**, and **SSIS**.
- Worked with **DACPAC** files for database deployment and versioning.
- Developed an **ASP.NET MVC** demo app showcasing dynamic **SSRS** connectivity.

SQL Database Developer

Cornerstone Advisors — Dec 2016 – Sep 2017

- Delivered **T-SQL** development for flagship Cornerstone Benchmarks reports.
- Built 40+ **SSRS** reports and **JSON-based data** integration processes.
- Developed a web-based financial analytics tool using **ASP.NET Core MVC** and D3.js.

Senior Database Administrator
FlipSwitch, Inc. — Jun 2015 – Oct 2016

- Tuned queries, indexing strategies, and implemented **HA/DR** with **WSFC/AlwaysOn**.
- Built schema auditing and queue monitoring systems to detect anomalies in **T-SQL**.
- Replaced ETL jobs with real-time **Transactional Replication** to reduce load on OLTP systems.

Senior Database Developer
Charles Schwab (via Randstad) — Dec 2014 – Jun 2015

- Designed an automated auditing solution across 1,000+ SQL Server instances.
- Delivered **PowerShell + SSIS + T-SQL** workflows for compliance and access monitoring.

Data Architect / Director of Information Infrastructure
OnePoint Patient Care — Sep 2008 – Jan 2014

- Built full-stack data infrastructure for OnePointRx web application (**SQL Server** 2012).
- Designed scalable **SSRS** architecture for multi-tenant, page-scoped reporting.
- **Integrated HL7 clinical data** into the **SQL Server** environment to support pharmacy operations.
- **Managed a dev team**, delivered **BI** and data services solutions, and led **Agile initiatives**.

Senior Database Administrator
Choice Hotels International, Phoenix, AZ | Jul 2007 – Sep 2008

- Supported choiceADVANTAGE®, the core reservation system, and enhanced performance via stored procedure tuning, index optimization, and architectural improvements.
- Conceived and led development of AIMS (Automated Index Management Solution), a scalable index optimization utility using **T-SQL**, **SSIS**, and configurable control tables—automating index maintenance across all **SQL Server** 2005 **OLTP** servers.
- Delivered supporting **SSRS** reports and documentation; solution eliminated after-hours manual index management and improved system performance.
- Used **Redgate SQL Backup** for automated log shipping and **SQL Server backups**; employed **SQL Compare** for schema validation.

CERTIFICATIONS
- **MCDBA (Microsoft Certified Database Administrator) – Jan 2006**
- MCP: Web Apps in C# / Visual Studio – Dec 2005
- MCP: Windows 2000 Server Admin – Sep 2003

EDUCATION
- **B.S. Business Administration — DeVry University, Phoenix, AZ (2003)**
- Magna Cum Laude | **GPA: 3.78** | Sigma Beta Delta Honor Society

Condensed résumé. For a more in-depth look at my experience and accomplishments, please see the full version of my résumé here: github.com/michaelshawnlockwood/MyResume