Alex Vilner / Database Architect / Developer **e.** [alex@sinoma.com](mailto:alex@sinoma.com)

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PROFILE

Senior architect with over 30 years of diverse experience in Software Development Lifecycle (SDLC), Agile environments, Enterprise Systems Architecture, Database Design, Database Architecture, Performance Tuning, Development, and Enterprise Reporting in Financial, Healthcare, Bio-Tech/Bio-Informatics, HR, Education, Consulting, Telecommunications, Manufacturing, and Utilities industries.

* Database Architecture / Design
* Database Performance Tuning
* BI / Enterprise Reporting
* Database Development
* Database Conversion / Migration
* Project Management
* Training / Mentoring
* Standards Definition
* Software Configuration Management
* Release Management

Special focus on enterprise level database applications, utilizing major commercial database engines (Oracle, Microsoft SQL Server, MySQL, MongoDB, Sybase, PostgreSQL, and others), including SaaS cloud-based implementations.

DATABASE / ARCHITECTURE EXPERTISE

**Architecture / Database Design**

* Design and build complex relational databases and data warehouses.
* Work with technical and end users to understand business requirements and identify data solutions.
* Develop strategies for data acquisitions, data recovery, & enterprise level database implementation.
* Provide leadership and direction to database developers.
* Provide an in-depth expertise with data security, storage solutions, database virtualization and replication as well as other complex technical tools and solutions.
* Define enterprise-level standards (coding, architectural, migration), platform and tool selection.

**Development**

* Perform tasks related to the full life-cycle development of software for internal and client use.
* Plan, analyze requirements, design solutions, develop and test application code. Knowledge and experience in Windows and Unix platforms using SQL (PL/SQL, T-SQL, ANSI-SQL) and non-SQL under Microsoft SQL Server, Oracle, MongoDB, PostgreSQL, Sybase, and other commercial and desktop databases.
* Development of ETL solutions, including enterprise level tools (e.g. Informatica), or database built-in utilities (SQL Loader, DTS, SSIS, etc.).

**Performance Tuning**

* Monitor performance of database management systems in VLDB/Big Data environments.
* Provide performance tuning of database systems for query and data load performance, including data partitioning, indexing, data model review/updates, etc.

**BI / Enterprise Reporting**

* Development of complex business intelligence reports with dashboards, drill-down, lookup and aggregation capabilities.

**Migration**

* Develop database migration strategies, including schemas, procedural code and data. Automate migration processes. Ensure database transparency for uninterrupted work of database consumers (users, applications, processes, feeds).

PROJECT MGMT EXPERTISE

**Project Management**

* Manage multiple projects simultaneously with focus on project planning, monitoring, budgeting, resource negotiation, scope containment, conflict resolution, risk mitigation, implementation, project status reporting, documentation and other PMO related processes.
* Manage, motivate and lead diverse cross-functional business and IT teams/workgroups including developers, business analysts, SQA analysts, and multiple outside vendors for running successful projects with proven ability of achieving projects in time and on budget targets.
* Proven ability to take over a project at any point in the Software Development Lifecycle (SDLC) and successfully bring to implementation on time, within budget, and to expected quality results.
* Proven history of collaborative leadership of global onsite and offshore teams.

NOTABLE PROJECT EXPERIENCE

**Sr. Database Architect / Perf. Tuning, IQVia (formerly, TransMed Systems and Inteliquet) [telecommute]**

**10/2011 – Present**

Oversee database architecture, development, and performance tuning (Big Data) supporting an Oncology Consortium solution, catering to clinical trials, medical research, biopharma, human genome sequencing, insurance, CROs, and real world evidence medicine. Develop interfaces and ETL solutions for EMRs and other medical systems. Create processes for loading Life Sciences and Oncology Consortium databases.

*Tools: MS SQL Server, SQL Azure, Docker, RabbitMQ, VMs, Oracle, MongoDB, Neo4J, MySQL, PostgreSQL, SSIS, Shell scripts (Windows PowerShell & Linux csh/bash/sh), EMRs (EPIC, Mosaiq, AriaMO/RO, OncoEMR, etc.), Visual Studio/TFS.*

**Sr. Database Architect, Braxton Technologies, Inc., Colorado Springs, CO [telecommute]**

**7/2010 – 9/2011**

Technical Lead/Major contributor in design, architecture, DB development and performance tuning of satellite launch/orbit tracking system, and global geo-tracking/navigation decision support/reporting system for major government/military contractors. Performance optimization in a transaction-intensive real-time data feed VLDB environments. Responsible for DB releases. Extensive data mining/data cleanup. Creation/maintenance of ETL scripts to support a variety of data sources.

*Tools: Oracle, MySQL, Linux Shell scripts, Python scripts, TOAD, Excel/Macros, ERWin, Seapine SCM, TestTrack.*

**Sr. Database Architect / Perf. Tuning, DigiNext, Boston, MA for Netherlands HQ [telecommute]**

**5/2010 – 6/2010**

Performance tuning in a transaction-intensive VLDB environment, with round-the-clock data collection and reporting. Achieved reduction in database response times for complex queries from several minutes to sub-second.

*Tools: MySQL, TOAD*

**Sr. Database Architect, EnerNOC, Boston, MA**

**3/2010 – 5/2010**

Database design, ETL, & development to assist client in preparation for key presentation for Massachusetts Department of Energy Resources (DOER). Presentation resulted in client winning the project bid.

*Tools: Oracle, MS Access, TOAD, ERWin*

**Project Manager/Sr. Architect, DinnerOut, Fort Lauderdale, FL [telecommute]**

**2/2008 – 3/2010**

Responsible for technology implementation of national food delivery/distribution system. Project management, selection of technologies, setting strategic direction, team selection, and coordination of global development/QA/Deployment.

*Tools: Microsoft SQL Server, MySQL, ERWin, Trac (Integrated SCM & Project Management)*

**Sr. Database Architect, Fidelity Investments (Strategic Advisers), Boston, MA**

**3/2005 – 1/2008**

Developed conversion strategy from Sybase to Oracle. Migrated schemas, procedural code and data. Designed and developed Informatica loaders for various external (Bloomberg, Lipper, Morning Star, Barra) and internal financial feeds (reference, returns, corporate actions, pricing, accounts). Developed back-end processing for Portfolio Optimization Engine for high-end clients. Prepared/deployed DB releases.

*Tools: Oracle, Sybase, MS Access, TOAD, SQL Loader, Informatica, ETL, Rational ClearCase SCM, ClearQuest, UNIX, Shell scripts, ERWin*

**Sr. Database Consultant, Workscape, Framingham, MA**

**11/2004 – 3/2005**

Designed and developed ETL solution for HR data loads. Diagnosed, troubleshot, and maintained core database logic; created database release packages for client deployments. Performed extensive database process optimization/tuning.

*Tools: Oracle, TOAD, SQL Loader, Rational ClearQuest SCM, UNIX, Shell scripts, ERWin, ETL, StarTeam SCM*

### Project Lead / Database Architect, Investors Bank & Trust Company, Boston, MA

**6/2004 – 10/2004, 12/2001 – 10/2003, 2/2000 – 9/2000**

Project management, architectural design, development & production support of mission-critical financial applications (Automated Trade Instruction, ETF, Cash/Asset Management, and Financial Data Repository) in a data warehouse environment. Complex data mining/replication/ETL. Prepared/deployed DB releases.

*Tools: Oracle, Oracle AQ, MS SQL Server, DTS (now – SSIS), UNIX, Shell scripts, TOAD, XML, Argent, Crystal Reports, Rational ClearCase SCM, ClearQuest, ERWin, Oracle collections, stored packages, object types, WebLogic*

##### **Sr. Database Architect, Thomson Financial (AutEX/GTS Group), Boston, MA**

**6/2004 – 10/2004 (p/t), 12/2002 – 1/2003, 10/2000 – 12/2001**

Architectural design, development & performance tuning of Global Messaging System. Database migration from Sybase to Oracle. Conversion of Financial Fusion with in-house solution. Extensive code optimization for guaranteed global message delivery under 10 seconds.

*Tools: Oracle, Sybase, UNIX, Shell scripts, FIX, WebLogic, ERWin, Financial Fusion, XML, CVS*

##### **Manager, Software Engineering Department, Ibis Consulting, Inc., Providence, RI**

**10/2003 – 6/2004**

Short- and long-term strategic planning (project management, budgeting, business development, vendor management, marketing, and performance reviews). C-level executive presentations. Architectural design, modeling, and performance tuning in VLDB transaction-intensive data warehouse environment in support of internal and web applications.

*Tools: MS SQL Server, Oracle, MySQL, Delphi, Microsoft CRM, BlueArc, Visual SourceSafe*

### Chief Instructor/Oracle Certification Program, Bryant College, Smithfield, RI

**11/2002 – 10/2003, Evening classes, part-time**

Taught *Introduction to Oracle PL/SQL*, *DBA: Performance Tuning*, *Introduction to Client/Server*, *Application/Database Design Methodologies*, *PowerBuilder Development*, *Object-Oriented Design and Development*, and *Master Lab* modules of the Client/Server program.

##### **Technical Lead / Senior Consultant/Architect, FLEXXperts, LLP, Natick, MA**

**2/1998 – 2/2000**

Design & development of Lease Tracking Application. Enterprise-level reporting. Client installs & training.

*Tools: PowerBuilder, Oracle, ERWin, IBT AIX, HP-UX, Shell scripts, MS SourceSafe, MS MTS/IIS, COM/DCOM, ASP, JavaScript, VBScript, Crystal Reports, ActiveX, OLE, MS Visual C/C++, MS Access*

### Sr. Developer / Architect, Healthcare Automation, Inc., Providence, RI

**8/1997 – 2/1998**

Architecture, design, & development of Distributed HomeHealth Solutions application.

*Tools: PowerBuilder, Sybase, Oracle, Crystal Reports, PVCS*

### Sr. Associate / Education Committee Chairman, c.w. Costello & Associates, Providence, RI

**5/1996 – 8/1997**

Database design & development (On-Line Customer Service Application for student-loan brokerage firm, Management Decision Support/Reporting System for major educational institution). Coordinated in-house education efforts, including scheduling, course development, and delivery.

*Tools: PowerBuilder, Sybase, Oracle, UNIX, Shell scripts, PVCS, SourceSafe, Novell, FoxPro, Sybase, SQR*

### Instructor, ComputerEd, Lincoln, RI

##### **1/1996 – 6/1996, Evening classes, part-time**

Taught *Oracle SQL*, *Oracle Database Administration* and *Oracle ToolSet* courses.

### Senior Consultant / Project Lead, QCC, Inc., Dedham, MA

##### **3/1995 – 4/1996**

Design & development of database-independent Data Warehouse Management System, including Logical & Physical Browsers, DataMart Definition, DataMart Load and Reporting.

*Tools: PowerBuilder, MS Access, Oracle, Sybase, DB/2, Informix, MS SQL Server, ODBC, Crystal Reports*

### Information Systems Consultant, Andersen Consulting, Boston, MA

##### **6/1994 – 3/1995**

Database design, development and tuning for Online Provisioning System for NYNEX (New York).

*Tools: Sybase, Oracle, OLTP, UNIX, DESIGN/1, METHOD/1*

### Programmer Analyst / SQL Server Specialist, American Power Conversion, Kingston, RI

##### **12/1992 – 6/1994**

Database design, development and tuning, application internationalization. DBA for MS SQL Server, InfoPump and Lotus Notes. Designed/set up complex replication between various DB platforms.

*Tools: MS SQL Server, InfoPump, NT, OS/2, PowerBuilder, Lotus Notes, ObjectView*

### Applications Specialist, Brown University, Providence, RI

##### **12/1989 – 12/1992**

Design, development and maintenance of database applications.

*Tools: FoxPro, MUSE, FoxBASE/MAC, MacOS, Novell*

### Programmer/Analyst, Center for Scientific Research, Minsk, Belarus

##### **6/1988 – 10/1989**

Design, development and maintenance of database applications.

*Tools: FoxPro, DBASE, C/C++, Pascal*

SOFTWARE

**PM Tools**: Microsoft Project

**Workstation Software**: Microsoft Office (Word, Excel, Visio, Outlook, PowerPoint), Lotus Notes

**Business Intelligence**: Crystal Reports, SQR, WebFOCUS

**Methodologies:** OOA/OOD, Extreme Programming (XP), RAD, JAD, DESIGN/1, METHOD/1, Agile

**Databases:** MS SQL Server (2008, 2012, 2014, 2016, Azure), Oracle, MongoDB, Neo4J, MySQL, PostgreSQL, Sybase, DB/2, MS Access, Lotus Notes

**DB/ETL Tools:** SSIS, Informatica, Spoon

**Cloud/Distributed:** Microsoft Azure, Amazon AWS, Docker, RabbitMQ

**Languages:** SQL (PL/SQL, T-SQL, ANSI SQL), PowerBuilder/PFC, Java, COM/DCOM, ASP, HTML, XML, Visual Basic, C/C++, FoxPro, ObjectView, dBase, Pascal, Basic, Lisp, Prolog, FoxBASE+/Mac, Assembler

**Design/Dev Tools:** TOAD, ERWin, DBArtisan, S-Designor, PowerDesigner, Rational (ClearCase, ClearQuest), Seapine Surround SCM, InfoPump, CVS, PVCS, StarTeam SCM, Visual SourceSafe (VSS), FIX, Financial Fusion

**Scripting:** PowerShell, CMD/BAT, csh/bash/ksh

**Operating Systems:** Windows 95/NT/2000/XP/Vista/7, OS/2, DOS, UNIX (IBM AIX, HP-UX, SunOS/Solaris, Linux), Mac OS, NetWare

EDUCATION

Brown University, Providence, RI, Bachelor’s Degree, Computer Science

FOREIGN LANGUAGES

Russian (fluent), Belorussian (fluent), French (conversational), Italian (conversational).