# Colin Nicholls

9 San Felipe Way, Novato, 94945

email: colin@spacefold.com cell: (415) 209 - 8878

### Education

Bachelor of Engineering (Electrical & Electronic), University of Auckland, New Zealand

# Blog

http://spacefold.com/colin/morethanfour/

### Skills

My experience ranges from working in corporate teams developing and integrating domain-specific database applications; to independent consulting in data integration.

Key strengths include relational database modeling and analysis; user interface design; API development; testing & debugging; team communication and management; and technical documentation and editing.

Outside interests include cycling; cooking; and music production in my home studio.

# Experience

Principal Data Architect -> Managing Principal, App Dev/Database -> Vice President, App Dev/Database DesignMind (November 2021 - February 2025), Director - Data Architecture & Engineering -DM (February 2025 - )

Project management, ETL and database design for Data Warehousing projects.

#### Data Analysis Consultant, TargetX (June 2018 - Jan 2019)

Reviewing numerous divergent Salesforce instances to derive a common data model and data warehouse; Preparing SQL queries and support tables to provide data suitable for visualization in online dashboard reports; Debugging of existing python ETL framework; Build scripts and documentation of a standard data model.

#### Technologies:

- MySQL and PostgreSQL;
- Python and Git source control;
- Salesforce;
- Enterprise Architect (documentation) and Flyway DB (scripting)

#### Co-CTO, Poseidon Saltwater Systems, Inc (Aug 2017 - Aug 2020)

Architectural design and implementation of a SQL Server database system to support an entirely new wastewater treatment process, including:

- Line-of-business office management and UI design;
- Data integration (weather station data feeds, bar-code scanner events);
- Design and implementation of logging API to enable data capture from facility automation PLCs, monitoring numerous "smart devices" in the processing plant.

#### Shared responsibilities include:

- Design and validation of analytic reports on historical automation data;
- Review of fluid-processing plant schematics and automation devices;
- Technical recommendations on VPN and networking equipment to facilitate remote support;
- Facility network design and debugging.

#### Technologies:

- Microsoft SQL Server and Reporting Services;
- Enterprise Architect (documentation, ERD and code generation)
- Flyway DB scripting under source control with Subversion;

### Oracle Data Analyst / Team Resource Manager at EC Wise, Inc (Nov 2007- Jul 2017)

Responsibilities included client liaison, preparation of technical design specifications, performance tuning, Oracle database administration for client QA and user acceptance environments; defining and documenting team standard practices in development, source control and release management.

#### Highlights:

- Taking over development of a major Data Warehouse implementation, and moving it to Production;
- Re-engineering the build process of our client's database tier and enabling clean automated builds of multiple versions.
- PL/SQL development and refinement of platform APIs in the database tier
- Performing code reviews for clarity, accuracy, and performance.
- Repository Steward of the source control system of the database tier for a major client project, and performing release management and deployments of version updates to production environments.
- Mentoring database team members in the US and China in technical issues, and working with Project Managers to prepare project plans and ensure that development work for our clients proceed smoothly and to schedule.

Data Integration Consultant, dba Spacefold, for Bally Technologies, Las Vegas (2005-2007)

Responsibilities included client liaison, preparation of technical design specifications, performance tuning, ASP.NET application development against an AS/400 back-end.

Software Developer, dba Spacefold, for Microsoft Corporation, Redmond, WA (2003-2006)

Designed and implemented new features of Visual FoxPro 9.0, as part of the Visual Studio Data Team at Microsoft. These features include language enhancements as well as Integrated Development Environment enhancements. This work included several phases in separate engagements, culminating in SP2 in 2007.

#### **Solutions Developer**, at Acxiom Corporation, Little Rock, AR (1999-2003)

Responsibilities included working as an integration engineer in the Strategic Alliances team, working with development teams at companies looking to integrate Abilitec and the Acxiom Data Network into their products.

#### Highlights:

 Maintained and extended a web service engine that provides a mechanism for query and update of a hosted Oracle prospect and customer database by third-party clients using SOAP transactions, using the Tomcat servlet container and SOAP toolkit components from the Apache Software Foundation, writing the web services and multi-threaded business logic in Java 1.3.1, using JDBC and JSP pages for support and administrative functions.

- Installed Siebel eBusiness application server and developed and documented a set of worked examples or "Labs" (using Siebel's own courseware as a model) that walk a prospective Siebel configurator through the process of integrating Acxiom's Batch CDI and real-time Solvitur4 Knowledge Broker XML service into a customized Siebel application.
- Co-developed a Java console application that listened for MQ-Series messages, transformed them
  using XSLT into Acxiom's Knowledge Broker XML request format, and posted the results back on to a
  response message queue. Used Java 1.2, IBM's MQ-Series Java SDK, and custom Knowledge Broker
  toolkit code.
- Prepared a proposal for how Acxiom could express their current and future products in a consistent XML messaging format. Although not adopted globally across Acxiom, many projects and business units in Acxiom used this document as a starting point for developing their specific XML message schemas.
- Designed and maintained a collection of Java packages, API documentation, and examples intended for integration by Acxiom and other third party developers to easily access Acxiom's online data products.
- Co-created and taught a training course on XML messaging over HTTPS to a customer who wished to incorporate Acxiom's real-time data cleansing into their application offering.
- Implemented version 1.3 and 1.4 of Acxiom's Data Network product, allowing real-time access to Acxiom's InfoBase data via XML over HTTPS (WebConnection, Visual FoxPro).
- Awarded a Bravo Project Excellence award for work on the ADN Software Development Kit.
- Designed an improved user interface for Acxiom's data cleansing wizard. (Visual FoxPro, InstallShield)

# Other Experience

Team Manager/Senior Consultant, Cornerstone Software, Auckland New Zealand (1993 - 1999)

Software Developer at Telecom New Zealand, Auckland New Zealand (1989-1993)

**Speaker**, at Technical Programming Conferences (1995 - 2004)

- dFPUG Visual FoxPro Konferenz, November 2004, Frankfurt, Germany
- Advisor/Microsoft FoxPro DevCon, October 2004 Las Vegas, Nevada
- Microsoft Visual FoxPro DevCon, June 1999 Palm Springs, California
- dFPUG Visual FoxPro Konferenz, November 1998, Frankfurt, Germany
- FoxTeach Visual FoxPro Conference, May 5-7 1996, Toronto, Canada
- Ashpoint 4th Australasian FoxPro Technical Workshop, 1995 Sydney/Melbourne/Auckland

**Technical Writer**, various publications (1993 - 1999)

Many of these articles are now hosted at <a href="http://www.spacefold.com/colin/articles/index.html">http://www.spacefold.com/colin/articles/index.html</a>.