

# Scott Nichol

---

463 Hidden River Road • Penn Valley, PA 19072-1112 • (610) 664-6045 • snichol@computer.org

## Summary of Qualifications

- Self-motivated technical leader who has successfully delivered quality software solutions and service-provider products for over 20 years.
- Proven ability to leverage broad and deep technical knowledge as a system architect, technical lead, project manager, and software engineer.
- Excellent communicator able to organize information and mentor.

## Technical Profile

- Strong programming experience in .NET (C# and VB), Java, C, C++, PHP, Perl
- Advanced knowledge of Microsoft SQL Server including performance tuning and troubleshooting
- Open source project team member for Apache SOAP and NuSOAP
- Application published to iPhone App Store
- Experience with object modeling (UML) and data modeling (ERwin)
- Databases: Microsoft SQL Server, Red Brick, Sybase, Oracle
- Web: PHP, ASP, JSP, servlets, ASP.NET, NuSOAP, Apache SOAP, jQuery, XML, XSL, IIS, Apache
- Network and distributed systems: sockets, DCOM, RMI, CORBA, ONC RPC, SOAP, REST
- Operating systems: Windows, Linux, AIX, Digital UNIX, iRMX, IRIX

## Experience

### PlusNetMarketing

2001-present

*Back End Architecture Consultant*

*Private company delivering innovative loyalty, rewards, personalized marketing and business intelligence solutions to retailers.*

Responsible for all aspects of back end architecture for applications and databases running in a 24/7 hosted model serving millions of consumers nationwide.

- Performed performance tuning, data management, data modeling and database administration of transactional and data warehouse databases using SQL Server 2000 and 2008.
- Developed high throughput multi-threaded nightly processing applications in .NET for bulk transaction processing, batch reporting, ETL and data summarization; implemented proof of concept applications in Java.
- Developed and maintained Transact-SQL stored procedures for efficient processing of complex transactions.
- Teamed with infrastructure leader on storage and network capacity planning, hardware and software migration analysis, issue resolution and technology evaluation.
- Developed administrative applications in .NET Windows Forms and ASP; proofs of concept in ASP.NET and JSP.
- Led load testing and performance analysis of web applications on WAMP.

### Triversity, Inc.

1999-2001

*System Architecture Consultant*

*Private company (now SAP Retail) delivering point-of-sale, customer loyalty, targeted marketing and fraud prevention solutions to retailers.*

Led the definition and development of Web applications and components for on-line access to a loyalty and customer relationship management (CRM) system.

- Designed, coded and tested Java software accessing SQL Server and Oracle, including a message server with thread and database connection pools; a servlet framework for applications creating HTML from XML and XSL; a protocol adapter layer for components accessed via RMI, SOAP, DCOM; and a marshaling and protocol framework for components accessed via SOAP. Prototyped Palm wireless access to the application.

## Scott Nichol

---

- Mentored junior Java developers.

### **bigchalk.com**

2000

*Software Development Consultant*

*Digital learning resource provider for the K-12 education market (now PreQuestK-12).*

Developed an Internet accessible K-12 curriculum product.

- Resolved issues porting legacy C++ product from IRIX to Linux including a rewrite of Oracle connection pooling.
- Coded and tested portions of the new application version in WebObjects and Java accessing Oracle.
- Mentored junior developer.

### **Harte-Hanks DiMark**

2000

*Technology Consultant*

*Direct marketing and database services provider to Fortune 1000 companies.*

Performed technical analyses for the SVP of Information Technology.

- Wrote analysis of the organization's readiness to serve as an application service provider.
- Wrote analysis of the marketing campaign management CRM software marketplace.

### **Stores Automated Systems, Inc.**

1996-1999

*System Architect and Project Management Consultant*

*Private company (now SAP Retail) delivering point-of-sale, customer loyalty and targeted marketing solutions to retailers worldwide.*

Led creation of the technical architecture and server-based processing for a targeted marketing CRM product.

- Evaluated and selected RDBMS and hardware platforms for a multi-terabyte data warehouse.
- Wrote system requirements specification.
- Created data flow diagrams and data warehouse and transactional data models using ERwin and Visio.
- Designed and coded data parsing, loading, summarization and extraction using Perl.
- Coded DLLs and COM objects in C++ for use by Visual FoxPro programmers.
- Administered SQL Server, Red Brick and Oracle databases, Digital UNIX servers, Citrix MetaFrame and firewall.
- Wrote technical white papers and gave presentations to prospective customers.
- Managed other contractors.

### **The Vanguard Group**

11/95-2/96

*System Architecture Consultant*

Evaluated IT projects within the organization for the AVP of Architecture and Infrastructure.

- Performed a project review of the IIS Data Warehouse that led to the creation of a performance measurement team. The team conducted a schema review, created a testing/measuring methodology and performed the tests. The results were presented to the Assistant Vice President responsible for the data warehouse project.
- Evaluated several proposals for COTS product acquisition, considering impact to operations, scalability, integration with existing systems, adaptability and company standards. Applications included general financial (A/P, A/R, G/L), sales force automation and financial services specific.

### **Pep Boys**

1/95-10/95

*System Architecture Consultant*

Provided technical recommendations to the VP of MIS.

- Created a plan for multiple aspects of Pep Boys IS architecture. This included a statement of general architectural principles and enumeration of current themes driving the architecture, as well as specific frameworks for development and deployment of applications.
- Compared the feasibility of implementing a data warehouse using Sybase on SCO UNIX versus DB2 on MVS.

## Scott Nichol

---

### **Pep Boys**

1/91-12/94

*Software Development and Database Consultant*

Worked with multiple teams to design, implement and maintain distributed applications integrating point-of-sale with other in-store and corporate systems.

- Created a manager's workbench application in VB, which focuses retail store managers on actionable business activities by providing complete, consistent, accurate and timely data that is relevant to operation of the store.
- Created a suite of applications in C++ and perl designed to improve the quality and responsiveness of the store systems support team. The applications have two key capabilities: real-time notification of remote events and distributed real-time monitoring of specific subsystems.
- Created a data conduit application in C++ and Sybase that polled point-of-sale data in real-time, parsed it and fed appropriately formatted subsets to other in-store applications. Provided real-time management and monitoring via a simple embedded HTTP server.
- Re-engineered C code for a retailer host controller to a multi-tier client/server architecture. The UI and database were replaced by VB code on the client and Sybase, respectively. Application logic in the C code was accessed by remote procedure calls.
- Created a perl framework for enterprise-wide error logging, notification and system management.
- Migrated UNIX applications using file-based databases to Sybase.

### **Stores Automated Systems, Inc.**

10/85-12/90

*Senior Software Engineer*

Worked with multiple teams to design, implement and maintain applications, system software and firmware components of a multi-faceted solution for retailers.

- As part of a team creating embedded software to integrate cash register, credit card reader, gas pump and POS controller, designed and coded in C a script-driven state machine to coordinate multiple tasks devoted to individual hardware elements.
- Designed and coded memory resident dynamically linked libraries and executable loader for iRMX and DOS using C and x86 assembler.
- Designed and coded in C and x86 assembler a cooperative multitasking executive running on DOS, including support for blocking and non-blocking I/O, intertask synchronization and communication, multithreaded applications and loading of both DOS and iRMX STL executable file formats.
- Designed and coded in C multithreaded communications software for credit card verification and file transfers, applying real-time analysis and design, task synchronization and communication, protocol implementation and hardware interfacing.
- Led a team of 2 to 5 developers that designed, coded, documented, tested and installed a suite of 80 applications for point-of-sale database and data transfer, constantly interacting with executives, customers, marketing, sales and support staff.

### **Selected Other Clients and Employers**

*Workzone LLC; The Boomerang Group; Future Products, Inc.; Philadelphia District Attorney's Office; Bottino's IGA; Landhope Farms; Malvern Scale Data Systems; DIS/ADLPIPE, Inc.; Westinghouse Electric Corp.*

## **Education**

### **Harvard University**

1985

M.A. Physics. University fellowship. National Science Foundation Fellowship Honorable Mention. Teaching Assistant.

### **Princeton University**

1982

B.A. *cum laude*, Physics. National Merit Scholarship. Thesis: "AES and LEED Studies of Indium Layers on GaAs(110)".