#### SCOTT RICHARD BENJAMIN

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# Summary

I have been working as a senior software developer/software architect for the last 20 years of my 30-year career as a software engineer. My expertise lies in the design and implementation of high-value enterprise solutions for private and public-sector clients utilizing the Standard and Core Microsoft .NET frameworks.

### Skills/keywords

- Software Engineering, Application Architecture, Cloud Infrastructure, Test Driven Development (TDD), Continuous Integration/Continuous Deployment (DevOps), Domain-Driven Architecture (DDA), Design Patterns, SOLID OO Principals, Service Oriented Architecture, UML Documentation, Rational Unified Process (RUP), Agile Programming (XP, Scrum), Systems Development Lifecycle (SDLC), Object-Oriented Programming (OOP), Code Review, Mentoring, Performance analysis optimization.
- C#, C++, Java, ASP, ASP.NET (MVC/MVP), VB.NET, Angular, Ionic, Go, JavaScript, JQuery, Perl, PHP, .NET Framework, DHTML, HTML, HTML 5, XML, XSL, CSS, Active Reports, Crystal Reports, Internet, WCF, WPF, Windows Workflow (WF), BizTalk, Transaction processing, .NET, LLBLGen, Microsoft Entity Framework (EF), NoSQL, Big data, AWS-Lambda.
- FileNet Content Management (CM) FileNet Workflow (BPM), Document Imaging, BPEL
- Entity Relational Database Design, SQL Server, Oracle, Sybase, PL/SQL, and T-SQL (Views, Stored Procedures, Triggers), Document database (NoSql), database optimization, and index tuning.

# Experience

#### **Senior Software Architect**

Cloudshadow, LLC - Nov 2015 - Jan 2021

- Worked as a key member of the architecture team to design and oversee the implementation of several enterprise solutions.
- Created unit and integration-based tests for TDD approach.
- Implemented continuous integration / development pipeline.
- Produced architectural and design documentation (UML, ERDB).
- Responsible for client-facing and internal code reviews, level of effort estimations, and development road maps.
- Responsible for mentoring several development teams.
- Technologies used: C#, .Net Core, WCF, WWF, WPF, ASP.NET, MVC, Microsoft .NET Framework, Subversion, Git, Multiple AWS technologies PostgreSQL, SOAP, NDepend, Resharper suite, Typescript, JavaScript, Angular 2+, Ionic, Apache Cordova, Jenkins, jQuery, performance profiling.

## Senior Technical Architect / Lead Developer

Independent to Deloitte for the State of New Mexico – Jan 2015 – Nov 2015

- Worked as a key member of the architecture team with business analysts to refine 'use case' based business requirements for the unemployment division's online fraud detection system.
- Created unit and integration-based tests for TDD approach.
- Produced architectural and design documentation (UML, ERDB).
- Designed and implemented a report engine used to automatically populate templates based on provided SQL queries.
- Designed and implemented a custom navigation engine to dynamically alter presentation-based on provided user statistics.
- Profiled and optimized many core systems for performance and memory use.
- Technologies used: WCF, FileNet (CM, BPM, Web Services) Microsoft .NET Framework, C#, MS Team Foundation Server, Oracle 11g, X500, SOAP, LLBLGen, msTest, NCover, ANTS profilers.

### **Senior Technical Architect / Lead Developer**

Independent to Deloitte for the State of Mass. - Mar 2010 - Dec 2014

- Worked as a key member of the architecture team with business analysts to refine 'use case' based business requirements for the unemployment division's online benefits system.
- Led design sessions, mentoring sessions, code reviews, and technical interviews.
- Created unit and integration-based tests for TDD approach and automated continuous integration and deployment. Implemented test coverage requirements.
- Produced architectural and design documentation (UML, ERDB).
- Designed and implemented a rules engine used to automatically make determinations on claim-based issues in the state's unemployment online system.
- Designed and implemented a guaranteed messaging system for electronic information exchange with employers and their agencies. (SIDES)
- Profiled and optimized many core systems for performance and memory use.
- Technologies used: WCF, FileNet (CM, BPM, Web Services) Microsoft .NET Framework, C#, MS Team Foundation Server, Oracle 11g, X500, SOAP, LLBLGen, nUnit, mbUnit, NCover, CruiseControl, ANTS profilers.

# Senior Technical Architect / Lead Developer

BearingPoint, Inc. for the State of Kentucky - May 2007 - Sep 2009

- Worked with business analysts to refine business requirements and the engineering team to establish development, testing, and production environments. Led design sessions, mentoring sessions, and code reviews. Produced extensive architectural and design documentation (UML).
- Designed and oversaw the implementation of a web-based (ASP.NET) enterprise workflow and content management application suite that integrates generically with line-of-business systems while isolating applications from the chosen workflow process, content management system, or entity relational data source.
- The application architecture implements a Service Oriented Architecture (SOA) including a web-based (ASP.NET) workflow and content management application which makes use of Model View Presenter (MVP) as a Supervising Controller which consumes a common service interface (facade). A hosting layer consumes the facade and offers services in the form of web services, TCP/IP, and net pipes. The remaining layers separate concerns into the domain/business layer, orchestration and data access layers. The data access layer makes use of custom providers for the Imaging and Content

Management data sources and implements a combination of abstract class factory, singleton, and adapter design patterns to decouple the data access from the chosen data source.

- Designed and implemented Java-based components for the FileNet workflow system.
- Technologies used: WPF, WCF, WF, FileNet P8 3.5 (CM, BPM, Web Services) Microsoft .NET Framework 2005, C#, Java, vb.NET, MS Team Foundation Server, MS SQL Server 2005, Windows Server 2003, Windows XP, IIS6.

### **Senior Technical Architect / Lead Developer**

BearingPoint, Inc. for the State of Louisiana - May 2005 - Feb. 2007

- Worked with business analysts to refine business requirements and the engineering team to establish development, testing, and production environments. Led design sessions, mentoring sessions, and code reviews. Produced extensive architectural and design documentation (UML).
- Designed a retirement solution working closely with Microsoft architects and BearingPoint developers as part of the architecture team to meet the needs of public employee retirement organizations. Re-factored design (Anti-Patterns) of batch style application tasks to utilize windows services while maximizing reuse of common code using the singleton, class-factory, strategy, and adapter patterns. Designed and implemented BizTalk orchestration and file interpretation to facilitate communication with financial institutions.
- The application architecture implements a Service Oriented Architecture (SOA) including a web-based (ASP.NET) user interface that implements Model View Presenter (MVP) via Microsoft's Composite Application Block (CAB). A hosting layer leverages web services (ASMX) via a common facade.
- Designed and implemented Java-based components for the FileNet workflow system.
- Technologies used were FileNet (Image Services, Content Services, PJAC)
  Microsoft .NET Framework, C#, Java, vb.NET, Oracle 9i, MS SQL Server 2000,
  Windows Server 2000/2003, Windows XP, IE6, IIS6, BizTalk 2004/BizTalk 2006, and Web Services.

## Senior Technical Architect / Lead Developer

BearingPoint, Inc. for Qwest, Inc. – Jun. 2004 – May 2005

• Worked with business analysts to refine business requirements and the engineering team to establish development, testing, and production environments. Led design sessions, mentoring sessions, and code reviews. Produced extensive architectural and

design documentation (UML).

- Designed and oversaw the implementation of enterprise-wide document imaging and workflow application to manage client correspondence and returned mail.
- The application architecture implements an n-tiered including web-based services separating the concerns into the presentation (using the page controller pattern), domain, business, and data access.
- Designed and implemented Java-based components for the FileNet workflow system.
- Technologies used were FileNet (P8, eProcess, Image Services, Content Services, BPM, Web Services, PJAC) Microsoft .NET Framework, C#, Java, vb.NET, Oracle 9i, MS SQL Server 2000, IE6, IIS6, and Web Services.

#### **Lead Developer**

Independent consultant to Guidant, GSC. – Dec. 2003 – Mar. 2004

- Worked with business analysts to refine business requirements. Produced extensive architectural and design documentation (UML).
- Re-factored, performance-tested, and documented application's data access and redesigned databases to tweak performance and normalize entity relational design flaws.
- Technologies used were SQL 2000, Oracle 9i, Java, VB.NET, TOAD, SQL Enterprise Manager, DTS Packages, T-SQL, VBScript, SAP, and Peoplesoft.

# **Lead Developer**

Independent consultant to Blue Cross of MN – Sept. 2003 – Dec. 2003

- Worked with business analysts to refine business requirements. Produced extensive architectural and design documentation (UML).
- Designed and implemented HIPAA compliance reports using Visual Basic with Access 2000 and Cognos Impromptu in conjunction with Oracle PL/SQL stored procedures.
- Technologies used were SQL 2000, Oracle 9i, VB.NET, TOAD, SQL Enterprise Manager, Cognos, VBScript, HIPAA, Syncrologic, and Peoplesoft.

#### **Lead Developer**

Independent consultant to US Bank – Sept. 2002 – Mar. 2003

- Worked with business analysts to refine business requirements. Led design sessions, mentoring sessions, and code reviews. Produced extensive architectural and design documentation (UML).
- Designed the workflow for consumer loan processing as a key member of the architecture and project management team.
- Managed and developed entity-relationship designs and database architecture (Oracle 9i, PL/SQL, and SQL2000). Coordinated development efforts to create common business objects for the bank's consumer loan exceptions tracking system.
- Designed and implemented several n-tiered applications (DNA) and FileNet Visual Workflow work performers (IMS, Panagon, Visual Workflow API).
- Designed and implemented Java-based components for the FileNet workflow system.
- Applications written using Visual Basic 6, Java, VB.NET, Oracle 9i, IBM MQ Series, FileNet Visual Workflow APIs, and Panagon IDM development tools.

### **Lead Developer**

Independent consultant to Merck-Medco, LLC. – Feb. 2000 – Mar. 2002

- Worked with business analysts to refine business requirements. Led design sessions, mentoring sessions, and code reviews. Produced extensive architectural and design documentation (UML).
- Coordinated development efforts as lead developer and project manager of the PIRS project. Designed and implemented several n-tiered applications for conversion to a paperless workflow system while supporting further development requirements of an existing imaging system.
- Applications designed include Image Retrieval (using VB, FileNet, and LeadTools),
  Image Scanning, and Indexing: application updates disparate data sources as a single transaction i.e. FileNet, DB2 via IBM MQ Series, SQL Server. (using VB 6.0, MS SQL 7.0, IBM MQ Series 5.1, IDM Desktop 3.1, Sheridan Active Controls), Exception Rescan Workflow (Visual Basic, FileNet Visual Workflow, Panagon IDM 3.1, Lead Tools Controls, TWAIN Scanning Interface, Oracle 8i, MS SQL Server, XML)

#### **Lead Developer**

Independent consultant to DLJ - Nov. 1996 - Feb. 2000

- Worked with business analysts to refine business requirements. Led design sessions and code reviews. Produced extensive architectural and design documentation (UML). Performed business reviews, built business cases, and proposed development of software to suit specific business needs.
- Designed and developed implemented several enterprise-wide, client/server, and ntiered applications for various groups throughout the firm. Including a document management application used by over 20 business groups.
- Applications designed include: Change Management (tracking and notification), Static TCP/IP allocation, Cabling (Moves and Changes), Capital Allocation Planning System, Time Allocation Tracking, Flex Viewer (Document Management and Workflow using FileNet/Panagon and custom components.), Task Management Queue (using MSMQ), Intranet Publisher (Using IIS, ASP, jDoc, VB, MTS, VBScript, JavaScript, FileNet/Panagon), Asset Tracking and Comparison (Intranet application using IIS, ASP, SQL, ADO, ASM x8086 chipset, VB 6.0, chipBASIC, barcode hardware/software, and custom hardware) and Trade Support Position Log (Intranet application using IIS, ASP, SQL, and VB 6.0)

# **Developer**

Independent consultant to Isomedix – Sept. 1996 – Dec. 1996

- Debugged and repaired database (MS Access 2.0) and custom I/O software/hardware (Visual Basic 2.0-3.0, serial and parallel I/O, high freq. DAC).
- The application is used to import data from a spectrophotometer and a thickness gauge via serial and parallel interfaces, perform business logic and generate statistics and reports based on the stored data.

# **Developer**

Independent consultant to The Resort Club – Feb. 1996 – Sept. 1996

• Planned and implemented back-file conversion of FileMaker Pro Database for Macintosh to MS Access replicating database for a distributed sales force.

• Worked closely with compliance and legal departments during business reviews, requirements gathering, and testing phases of this project

### **Developer**

Independent consultant to Net Access, Inc. - Sept. 1995 - Feb. 1996

• Developed Unix based BackOffice utilities including a custom accounting package integrated with Radius authentication (UNIX, C++) and a custom chat package (UNIX, C++, and TCP/IP socket code).

### **Developer**

Independent consultant for B&T Enterprises – Jan. 1990 – Sept. 1995

- Developed several POS applications using Visual Basic, Sybase, and FileMaker Pro.
- Developed a proprietary Real Estate marketing tool that parsed MIS feed data and updated an MS-SQL Server database with specific information. MS Access was used to generate detailed reports.
- Responsible for all aspects of the application life-cycle for many clients.