

Mitch Stuart

San Jose, CA
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TECHNICAL SUMMARY

- **Languages:** Java, JavaScript, SQL, C#, C++, C, Python.
- **Databases:** Oracle, MySQL, PostgreSQL, SQL Server, Berkeley DB.
- **Web Technologies:** Servlets, JSP, Struts, HTML, DHTML, XML, XSLT, CSS, SOAP.
- **Application Technologies:** J2EE, Spring, Hibernate, Swing, .NET Framework.

EMPLOYMENT

1/06 to
present

LinkedIn, Palo Alto, CA

Principal Engineer

Designing and building server technology for this professional networking service.

2001 to
present

FullSpan Software, San Jose, CA

Principal Engineer

FullSpan Software is my "one man shop" where I develop open source software in my spare time. I have also done a few consulting projects for friends over the years. For details and downloads of my projects, please visit <http://www.fullspan.com/>.

1/03 to
7/05

Cisco Systems, San Jose, CA / **FineGround Networks**, Campbell, CA
[Cisco acquired FineGround]

Principal Engineer

AppScope. Designed and built features for this web app performance reporting product: XSLT template-based reports in HTML and PDF (via Apache FOP); dynamic filtering, grouping, and drilldown; location to IP address range mapping; and saved reports with ability for on demand or scheduled execution. Added in-memory data aggregation for 6x performance improvement and 10x reduction in database size.

AppScreen. Designed and built features for this web app security product: detection of common vulnerabilities (cross-site scripting, SQL injection, etc.); XML-based rule specification; flexible policy definition with reporting and notification; HTTP content inspection.

Web App Infrastructure. Created web app context with widgets for standardized parameter handling, HTML rendering, and error handling. Also built a database layer for query binding and execution, and an XSLT function library.

Database Migration. Designed DB migration to automate schema and data changes during customer upgrades. This includes flexible metadata description of migration paths; graph traversal algorithm to determine optimal migration path; and engine to perform migration steps using any combination of SQL scripts and Java code.

NMS Integration. Developed MIB for publishing performance statistics to network management systems via SNMP agent. Implemented web-based GUI for

grouping transactions by location, domain, URL, query parameter, or custom attribute. Documented HP OpenView integration to alert network administrator when performance threshold is exceeded.

Development Environment. Implemented Perforce configuration management system (migrated from SourceSafe). Converted build system from shell scripts to Ant.

12/99 to 1/03 **BridgeSpan**, Mountain View, CA [Hall Financial Group acquired BridgeSpan]

Principal Engineer and Architect

Lead architect for BridgeSpan's real estate settlement (title and escrow) application.

Data Management. Built a lightweight JDBC RowSet-based business object framework, which was 2x faster and 30% more memory-efficient than Sun's beta CachedRowSet. This included automated Java code generation with self-documenting schema mapping. Implemented a caching layer with cluster-wide coherence and web-based administration, which dramatically improved application response time.

Security. Created a role-based table-driven security manager to control access to JSP pages and business logic. Implemented mutually-authenticated SSL and SOAP messaging for secure partner communication. Wrote a security white paper that was distributed to customers and partners.

Finance. Built a suite of trust accounting features including escrow account management, check printing, and automated online wire transfers.

4/99 to 12/99 **iSelect**, Santa Clara, CA [company ceased operations]

Principal Engineer

Architect and lead engineer for iSelect.com, an e-commerce web site. Developed most of the server-side infrastructure, including the data model, business object layer, object-relational interface, and session management.

1/98 to 4/99 **Icarian**, Mountain View, CA [Workstream acquired Icarian]

Principal Engineer

Architect and lead engineer for Icarian Workforce, a Web-based workforce management system. Besides leading the overall design and team, personally developed several major components, including the workflow engine (with form-based rules editor and customizable steps), a lightweight metadata infrastructure for mapping object properties to the database, and the headcount analysis module.

6/97 to 1/98 **WebFlow**, Santa Clara, CA [company ceased operations]

Software Development Manager

Led the development of the WebProject 3.0 Application Server, a web-based collaborative project management system. Developed a Windows NT service in C++ exposing a dual COM interface (IDispatch/Vtable) callable from Active

Server Pages. Implemented document and discussion-thread storage using the ADO interface to SQL Server.

8/92 to
6/97 **Gupta Technologies**, Menlo Park, CA

Software Development Manager, Centura Web Developer

Managed development of a Web Application Server, Gupta's first Internet product. Designed and personally coded Web Application Console, allowing administrators to view and manage all Application Servers on the network.

Manager and Senior Software Engineer, SQLBase Platforms Group

Supervised the porting of the SQLBase database engine/server to new platforms, and the implementation of new platform-specific features.

1/90 to
8/92 **Software Publishing Corporation**, Santa Clara, CA
Senior Software Engineer, Database Group

6/87 to
1/90 **Hewlett-Packard**

Software Design Engineer, Distributed Database Lab, Cupertino, CA
Senior Programmer/Analyst, Corporate Accounting Systems, Palo Alto, CA

EDUCATION

1987 **University of Michigan**, Ann Arbor, MI
MBA in Finance and Information Systems
Managing Editor of student newspaper. Consultant and Manager of computer lab.

1985 **Wayne State University**, Detroit, MI
BA in Computer Science with High Honors
Elected to Phi Beta Kappa.

PUBLICATIONS

Samples of my documents and code are available at my personal website: fullspan.com.

A Reusable Network Enumeration Class, *Windows Developer's Journal*, February 1997.

RPC Tips and Tricks, *Windows Developer's Journal*, November 1996.