

Expertise

Software design and development, especially client/server systems.

Experience

Lead Scientific Programmer/Analyst

2002 - present Baylor College of Medicine, Houston, TX

- Participated in ongoing design and implementation of client/server software systems to manage "Hyperscanning": the simultaneous, networked execution of fMRI experiments on multiple subjects (Java, XML, DICOM)
- Designed and implemented a system to manage secure access to and encryption/decryption of data resulting from Hyperscan experiments (Java, XML, servlets, SSL, encryption)
- Designed and implemented system to synchronize the operation of a network of Siemens MRI scanners (C, C++, MFC, sockets, VxWorks)

Software Developer

2001 - 2002 Quaadros Technologies, Inc., Houston, TX

- Participated in design and implementation of LinkNotes and VoiceFlyer web presentation software products, as well as the NetRooms networked data server (Java, applets, Swing, AWT)
- Re-wrote LinkNotes and VoiceFlyer viewer applets for the Microsoft Virtual Machine (Java, Visual J++, applets)
- Designed and implemented system for compressing voice audio data utilizing Vorbis compression routines (Java, C++, JNI, Vorbis)
- Re-designed and implemented system to synchronize playback of mouse position points to recorded voice data (Java, C++, JNI, DirectX, MFC)
- Designed and lead implementation of VoiceFlyer product re-write for Microsoft .NET (C#, XML, managed C++)

Staff Software Architect

1998 - 2001 Interliant, Inc., Houston, TX

- Participated in planning and architecting the integration of Interliant's major enterprise applications, as well as planning the migration of Interliant's legacy billing and accounting systems to the standard enterprise platform.
- Led a nine-person Extreme Programming team in designing and implementing an application hosting framework for Microsoft Exchange. Worked directly with Microsoft product groups and incorporated pre-released Microsoft software (Exchange, CDO, Visual J++, XML)
- Led a five-person Extreme Programming team in designing and implementing a generalized object-oriented billing system in Java and SQL. This billing system was selected as Interliant's enterprise-wide billing solution (Java, JDBC, XML, SQL)
- Led implementation of an order entry system for Interliant's Domino Instant! Host service (Lotus Domino, LotusScript, Java, XML, JDBC, SQL)
- Designed and led implementation of a billing and accounting system, including PowerBuilder interfaces, for Interliant's Domino Instant! Host service (Java, JDBC, SQL, PowerBuilder)

Manager, Software Development
1996 - 1998 Interliant, Houston, TX

- Managed five software developers and the PowerBuilder and Lotus Notes development projects on which they worked.
- Designed and led implementation of the SQL backend and Java access layer for Domino Instant! Host rentable application hosting framework. Worked directly with Lotus product group and developers (Java, JDBC, SQL)
- Developed an object API for SQL data manipulation in Java. API has been successfully used in all Java/SQL projects since (Java, JDBC, SQL)
- Specified and led development of order entry and data collection systems for Lotus Instant! Teamroom, Interliant's first rentable application service (Lotus Domino, LotusScript, Java, JDBC, SQL)

Software Developer
1994 - 1996 Interliant, Houston, TX

- Designed and implemented extensions to Interliant's accounting, billing, and data acquisition systems (PowerBuilder, SQL, Lotus Notes)
- Converted Interliant's billing and accounting user interfaces to updated SQL database design (PowerBuilder, SQL)
- Automated several internal processes (Lotus Notes, Perl, PowerBuilder)

Education

Rice University, Houston, TX
1990 - 1994

- B.S., Electrical Engineering
- Extensive Computer Science electives