

CAREER SUMMARY

Experienced in evaluating technology, making recommendations, and negotiating contracts. Years of design, programming and testing for Fortune 100 companies, from very large enterprises to very small high-end consulting. Expertise in Internet protocols, wireless technology, object-oriented design, cross-platform development, designing real-time software, operating systems and parser-translators. Rapid object-oriented programming focused on reuse, maintainability, and testability.

WORK EXPERIENCE

National Product Sales (NPS)	Salt Lake City, Utah	12/03 – 8/04
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Principle Programmer – Internet/Intranet Support & Design

- Designed and implemented web-enabled end-to-end job application and recruits system.
- Designed and implemented wireless PDA interface to inventory database using bar codes.
- Supported and updated online storefront.
- Managed server certificates and secure HTTP.
- Interfaced MySQL and Microsoft SQL Server.

>>>**Skills used: VBScript, MySQL, MS SQL, PHP, JavaScript**<<<

American Electric Power (AEP)	Columbus, Ohio	8/00 – 5/03
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Project Manager/Infrastructure Architect – Initiated and lead projects.

- Defined, designed and led virtual teaming project permitting distributed team to interact.
- Headed team of experts to create near- and far-term wireless infrastructure.
- Guided/oversaw effort for front-to-back network solutions for in-field projects.

Technology Expert – Research and recommend technologies

- Consulted PDA synchronization solution (Extended Systems' XTNDConnect).
- Analyzed viability of wireless technologies in AEP Information Technologies.
- Guided Knowledge Management project in building needed infrastructure.
- Moderated Java Communities of Practice.
- Installed and analyzed Microsoft's support for the next generation of the Internet (IPv6).

Technology Researcher – Assess and propose additional internal projects.

- Wrote near-realtime application for special commodities exchange for BlackBerry (C++).
- Wrote time reporting tool for Palm/PocketPC that will be interfaced with PeopleSoft DB.
- Wrote time reporting prototype for BlackBerry that interfaces with server wirelessly.
- Wrote budget manager for the Palm to evaluate viability of AppForge product.
- Created IPv4 multicast tool to verify intranet support.

Industry Partner Liaison – Contracts and negotiation.

- Found best technology contenders using both internal and external product providers.
- Ran pilots to compare products & analyze adaptability to AEP infrastructure.
- Negotiated and coordinated product samples/evaluations units for internal review.
- Collected internal needs and aligned them with product offerings for "best fit" solutions.
- Saved company over millions of dollars in the selection and negotiation of products.
- Created cost and chargeback figures for internal product offerings.

>>>**Skills used: Enterprise Java, J2EE, DB2, Java Beans, C++, VB Mobile, contract negotiation, project leadership, presentation, facilitation, needs analysis, embedded systems programming, OOA/D** <<<

Nationwide Enterprise (NI, NF)

Columbus, Ohio

3/99 – 8/00

Project & Technical Lead for NI Authentication.

- Created complete authentication & authorization project.
- Led six-programmer team to implement Site Server implementation.
- Invented “smart” Authorization Activation Keys to be mailed to clients.
- Created special COM for generating and testing Authorization Activation Keys.
- Interfaced with over 15 different business areas, standards groups, and projects.
- Defined simplified interface for Internet apps & personalization.
- Designed special measures for cracking detection and account lockout.
- Integrated Internet and Intranet authentication for Single Sign-On (SSO).
- Finished ahead of schedule – twice.

Project & Technical Lead for B2B with Discover Card Affinity

- Designed Intranet tool for customer service reps to collect Discover card info.
- Integrated process with weekly reporting to Discover Corp.
- Led four programmers to implement and integrate product.
- Completed project early.

Authentication Expert – Reviewed & selected authentication product.

- Gathered & defined NI requirements for authentication.
- Synchronized with Nationwide Enterprise’s requirements.
- Defined interface for disparate authentication products (iPlanet & MS Site Server).
- Identified and proved security holes in implementation.
- Provided alternative measures and counter measures for security holes.

Search Engine Expert – Analyzed & recommended different search engines.

- Collected info on Verity, MS Site Server, AskJeeves.
- Trained in Verity site implementation and low level development.

Senior Process Scientist – Project Analysis & Design.

- Adapted UML to current processes.
- Took the current processes to the next steps of analysis and design.
- Defined easy to use process for working with databases and object modeling.
- Integrated legacy work into development process.

Y2K Compliance Leader – Ensured teams’ readiness for Y2K.

- Collected information about each person’s desktop and ensured compliance.
- Led proof of compliance on three software products.
- Demonstrated 100% readiness before many other departments.
- Filled monthly reports on progress.

Configuration Management Rep – Led team’s integration into company’s CM plan.

- Identified external products we were dependent on.
- Created contingency plans.
- Designed repository for internal documents and products.

>>>**Skills Used:** Team Leadership, C++/COM+ development, development process, product evaluation & recommendation, OOA/D. <<<

Lead Technical Scientist – Training, course development & mentoring.

- Experienced trainer in process improvement and object technologies.
- Created advanced C++ and Java courses from object view.
- Revised & updated OOA/D courses: Managers Overview, Requirements collection & validation, Object-Oriented Analysis and Object-Oriented Design.
- Updated courses to incorporate UML (in-process).
- Taught Requirements Gathering, OOA/D, C++ and Java courses.
- Highly praised as an exceptional and knowledgeable instructor.
- Consulted several companies for technical issues.
- Provided company's intranet and internet solution (at minimal-recurring cost).
- Presented topic on "Heuristic Algorithms" at local ACM chapter
- Adjunct lecturer (faculty) at OSU Computer Information Sciences Dept.

>>>Skills used: Course construction, facilitation & teaching, process definition & design, network administration, presentation, C++/Java, OOA/D.

>>Certifications: Course designer, OOA/D instructor, C++ instructor, Java instructor, Requirement instructor. <<<

Advanced Programming Resources Columbus, Ohio

10/95 – 2/99

Principle Consultant – RIM technology development.

- Prototyped stock & bank transaction application for RIM 950 email pager.
- Worked with high-level C++ framework and low level messaging protocols.
- Integrated with back end support and servers.

Senior Consultant (CAS) – SGML conversion to Oracle DB.

- Wrote Omnimark programs to convert journal bibliographies (SGML) to Oracle-ready data.
- Wrote public-domain tool that creates DTDs from markup file.

Senior Consultant (OCLC) – Cross platform C programming.

- Analyzed and designed bibliographic record converter (USMARC & UNIMARC).
- Worked with a three person team implementing 600+ page conversion specification.
- Used fail-safe techniques to write code that proved nearly 100% algorithm bug-free (1 defect per 10,000 lines of commented C source).
- Wrote more than 50% of the 45K lines of fully documented source, and implemented more than 80% of the conversion specification.
- Built and maintained a library of tools to facilitate conversion process.
- Cut development time from 18 months to 9 months.

>>>Skills used: Data translation, C/C++/Java development, embedded systems, OOA/D, mainframe, SQL. <<<

Intelligent Algorithmic Solutions

1/85 – present

Consulting

- Built multi-node Linux boot simulator to determine cause of BOOTP failure for University of Utah Computer Science Dept.
- Wrote securities investment simulator for investor.

PDA Development

- Designed/prototyped decision-maker tool for the PalmOS in Java.
- Designed & wrote Java utility budget/money manager for PalmOS using Java.

Publications

- Published book on IPv4 socket programming in C/C++/Java for Linux.
- Published several articles on using C/C++/Java network programming to extend applications.
- Wrote book on IPv6 socket programming in C/C++/Java for Windows and UNIX/Linux.
- Published book on computer fundamentals.

>>>Skills used: C++/Java, embedded systems (PDA), network administration, OOA/D, simulation techniques.<<<

Metatec Corp.

Columbus, Ohio

1/94 – 10/95

Lead Designer & Programmer – Windows/DOS CDROM applications developer.

- Implemented a stocks query interface in Visual Basic for Media General's stock database DLL with 8300+ companies and 17000+ fields.
- Designed & implemented a custom, high-performance, CDROM database.
- Wrote a language interpreter for a tutorial interface which simulated user input.
- Wrote a parser/translator to convert user queries into Fulcrum database queries.

Lead Process/Mentor – Windows/DOS CDROM applications developer.

- Mentored several engineer developers with theory, design and implementation.
- Improved data preparation using network multiprocessing (7-10 days down to 2).

>>>Skills used: Custom database/query, C/C++/Java development, facilitation & team leadership, OOA/D. <<<

Novell, Inc.

Provo, Utah

8/93 – 10/93 (layoff)

Test Development Engineer – Primary DOS PConsole test developer.

- Learned advanced C++ development and beginning Windows programming.
- Automated tests while using established test cases and automation.
- Designed code volatility metrics to track code evolution and potential "hot spots."

>>>Skills used: Testing, technique research, presentation. <<<

Hewlett Packard Co.

Boise, Idaho

5/89 – 8/93

Development Tools and Testing -- (1991-93) Tool-design for coding and QA

- Created automated tests to validate Adobe PostScript®.
- Adapted the LaserJet 4Si to comply with power conservation Energy Star.
- Headed control panel testing for functionality & display messages.

Inventions -- (1989-91) LaserJet context switcher architect

- Created Canon printer engine emulator (using the 8052) to simulate engine signals to a formatter. Saved company approximately \$300,000 per evaluation engine.
- Built demonstration ROM SIMM for superstore marketing. Completed development and testing in one-third projected time.
- Used fuzzy-logic to attain greater than 99.992% switching reliability. Includes hooks to support other language detectors. Unique design submitted for patent.

>>>**Skills used:** C/C++ development, OOA/D, embedded systems (32- and 8-bit) programming, code inspections.<<<

>>>**Certifications:** Code inspections, test development, walkthroughs. <<<

Independent Consultant

Provo, UT

1/86-5/89

- Wrote device driver for tape device.
- Taught course on intermediate and advanced UNIX V to Unisys employees.
- Analyzed Transputer multiprocessor and recommended techniques to migrate processes to increase process throughput.

Throughout college years (1984-89), I worked as a teacher's assistant, consultant, and instructor.

EDUCATION

Computer Science Masters of Science (1990), Brigham Young University.

Computer Science Bachelors of Science (1988), Brigham Young University.