

Appendix: Project Experience

1. Areas of Expertise

- Robust, scalable, and flexible enterprise software architecture
- Distributed object computing and middleware (TUXEDO, CORBA, J2EE, WebLogic, ...)
- Interfacing heterogeneous information sources
- Database intensive applications
- Java/C++ programming (in depth-knowledge of language and programming style)
- Library and framework design, building and maintenance

2. Project Summary

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| Dec. '01 ~ June '03 | BSM, LG Anyang Research Laboratory |
| Description | Base station management system for CDMA 1X & EVDO telecommunication systems |
| Technology | Java (Swing, JNI, RMI), C/C++, NetBeans, Informix, VxWorks, Solaris |
| Role | Project leader & chief developer in GUI & middle-tier server <ul style="list-style-type: none">- Human resource management (about 7 developers under direct management) and project scheduling Designed and developed <ul style="list-style-type: none">- Integrated GUI and GUI server framework (12 sub modules in this part)- Reliable message delivery servers and terminals- Statistical information processing server |
| Comments | This project was successfully completed despite its tight deadline for the market demand and was used as a basis for a similar system for WCDMA. The biggest technical challenge on my role was to handle huge amount of statistical information in Java and design coordination of sub modules. |

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| Dec. '00 ~ Aug. '01 | CPMS, SHB (Shinhan Bank), Nuri Solution |
| Description | Mainframe downsizing project for Credit Process Management System in SHB |
| Technology | EJB(WebLogic), Tuxedo, C/C++/Java/VB, ERWin, Informix, HP Superdome |
| Role | QA <ul style="list-style-type: none">- Provided technical support to other developers- Was a key member in developing the prototype and diagnosed problems at all stage- Designed and implemented mediator engine for multiple information sources |
| Comments | A very successful project that was completed before its deadline and was awarded by the client. My mediator engine was used in 5 other projects involving 80 developers at that time. It was still being used after 7 years with only minor upgrades due to backend software change. |

Sep. '00 ~ Dec. '00 DART, KOSDAQ

Description Electronic Corporate Information Disclosure System for the stock market (the 3rd electronic system in the world after EDGAR in USA and SEDAR in Canada)
 SGML documents authoring, storing, transforming, dissemination, and publishing system
<http://english.kosdaq.com>, <http://dart.fss.or.kr> or <http://english.fss.or.kr>

Technology Java/VB/C, Oracle (OPS), IBM

Role TF Team for system restructuring (application tuning, DB/Hardware restructuring)

- Responsible for diagnosing and correcting problems in application programs
- Redesigned and implemented an SGML document filtering & dissemination engine
- Redesigned and implemented an SGML-to-Text & HTML transformer

Comments It was a heavily loaded system; 50 million transactions in just a few days. When I joined the project, the system had serious performance problems; it kept crashing during its peak load and required manual data recovery. The system was able to handle its peak load very smoothly after the completion of the project.

May '00 ~ Aug. '00 Cretop, Korea Credit Guarantee Fund

Description Online credit information market
<http://www.cretop.com>

Technology Java/C++(g++), Oracle, SNA, HP

Role Chief developer, designed and developed:

- Application framework for other developers
- Reporting module for receipts and various reports
- Back-end server that provides unified interfaces for various information sources including mainframe, UNIX servers, and external data sources.

Feb. '00 ~ Sep. '00 XYCampus, Choong-ang IT Institute

Description Online community portal service
<http://www.xy.co.kr>

Technology PHP/Java/C++(VC), Oracle, AIX

Role Developer, designed and implemented:

- Distributed chatting server and client
- Main memory database module with restricted query interface
- Chatting partner recommendation algorithm

Dec. '99 ~ Apr. '00 IPNMS, Korea Telecom

Description IP network management system
 A large-scale sub project for building nation-wide super-speed internet backbone

Technology CORBA, SNMP, C++(g++), Oracle, Solaris

Role Chief Developer, designed and developed:

- Main application framework

- Persistent event queuing, QoS service
- Interconnection service between sub projects

Comments The challenge was to endure a burst of signals. Providing reliable services for other distributed components was also an important requirement.

Sep. '98 ~ Oct. '99 WINGS, BIRDS 1st, 2nd, SK Telecom

Description Base station Integrated Recovery, Diagnostics, and Surveillance system for Cellular Network
Rule-based automatic fault management system

Technology CORBA, Java/C++, Oracle, HP

Role Developer, designed and implemented:

- Main GUI program
- Real-time fault signal delivery service
- Pager reset module: automatic reset of hardware devices from faults using pagers
- Script language interpreter for web interface

Comments The functionality of the script language was similar to that of JSP

July '98 ~ Aug. '98 Internet book shopping mall, SERI (Software Engineering Research Institute, KISTI Supercomputer Center presently)

Description Prototype development of an internet commerce system

Technology CORBA, C++

Role Research engineer

- Surveyed internet e-commerce architecture and method
- Prototype development

Mar. '98 ~ July '98 DDMS, KOPEC (Korea Power Engineering Company Inc.)

Description Prototype development for a design document management system

Technology Metaphase, CORBA, C++(Sun Workshop), Oracle, Solaris

Role Developer, designed and implemented:

- Document version management system
- Interfacing library for CAD, Metaphase, and database

Dec. '97 ~ Feb. '98 Duo ExamMaster,

Description Desktop Exam authoring package

Technology C++ (VC), DAO

Role Developer, designed and implemented:

- Exam editor, equation editor

Comments Similar to MS Power Point, but customized to editing and printing exam papers.

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| Mar '97 ~ Dec. '97 | SuBul system, Ministry of National Defense |
| Description | ERP for munitions |
| Technology | C++(VC), Rational Rose, TUXEDO |
| Role | Developer - Prototype implementation of business objects interfacing the TUXEDO middleware Lecturer - Taught other developers C++, VC, and how to implement business objects efficiently |
| Comments | System was modeled with complex business objects. Implemented the business logic in VC++. |