Advanced Technology Solutions, Inc. - 9/95 to 3/01

Advanced Technology Solutions, Inc. - 4/99 to 3/01

Team leader on the Telcordia Customer Manager (TCM) project. Managed the development efforts of three senior level programmers. This team implemented several CORBA FCIF interfaces. FCIF stands for Flexible Character Interface and is a Telcorida protocol very similar to XML. These interfaces provide connectivity between the Vantive Customer Care GUI and several Telcordia systems, including CNUM, ALOC, and DELIVERY. This subsystem also contained all the code for the HTML web interface used to view and print order information. This team completed all tasks on or ahead of schedule. Developed a code generation tool called "genFCIF" which was used exclusively to generate the first iteration of the production code directly from the FCIF requirements. Implemented the common base code libraries which provided logging, tracing, and Oracle OCI capabilities. Also developed an interface between the TCM system and the Kenan Arbor BP system to allow direct entry of billing information as soon as services are provisioned. Created the source code control tree and the build environments.

Advanced Technology Solutions, Inc. - 3/98 to 4/99

Designed and implemented a new Arbor BP feature which is used to modify the service instance ids when new area codes are introduced. This utility was written in C using the Kenan Arbor BP API. It reads a table of new area codes and local exchanges, updates all appropriate phone numbers, and logs all changes to a report file with a summary. Built an internet HTML application for an ecommerce startup using an ERwin designed Oracle 8i database and numerous C coded CGI modules. This system has 10 times the performance characteristics of similar systems built using tools such as Cold Fusion and Jasmine. Developed an Oracle OCI database tool to facilitate table maintenance, debugging and regression testing. Developed in C++ using the Kenan OM class libraries an adjunct process that provides email notification when different milestones are reached.

Advanced Technology Solutions, Inc. - 6/97 to 3/98

Senior developer on NCR's NIW (Network Information Warehouse) project. Designed the Logical Model for this multi-dimensional data warehouse application, using the ERwin tool. Responsible for the physical design of the model in Oracle and developed a working simulation of a tri-state phone company with realistic usage data from hundreds of telco switches. This simulation was to provide the basis for developing optimization models for improving switch and trunk utilization. Later combining this with cost and revenue data would provide the data for models that could help improve the profitability of the network. Utilities to do data extraction, cleansing, loading, and querying were largely generated automatically with the "oragen" tool I developed for NCR's SRSM project. Attended a series of Yield Management lectures on applying statistical methods to Data Warehouses to improve customer retention and reduce direct marketing costs. Investigated Data Quality issues, including the use of numerical and analytical tools from companies such as Trillium and Matchware.

Advanced Technology Solutions, Inc. - 8/96 to 5/97

Senior developer on NCR's SRSM project (Services Remote Server Management). Developed the logical and physical design for a 20 GByte Oracle database which NCR will use to improve service to customers while reducing their own internal costs. Performed Unix system admin and DBA functions. Migrated from Oracle version 7.2 to 7.3. Established the development environment including porting the Rogue Wave C++ toolset to MPRAS, configuring SQL Net, and building the source code tree. Implemented 4 major modules using C, C++, lex, yacc, and ProC consisting of over 5,000 LOC with only 5 MRs. Developed a C++ class code generator for Oracle tables called "oragen". Rewrote several system utilities using oragen which derived hardware and software system configurations. The new versions executed 20 to 40 times faster, greatly reducing the amount of time necessary to do remote system maintenance. Attended "Object Oriented Analysis and Design" course which covered "Use Case Diagrams" and other OMT concepts.

Advanced Technology Solutions, Inc. - 9/95 to 7/96

Consulted for Hewlett Packard doing on site contract support to AT&T at Red Hill and Middletown N.J. locations. This work involved trouble shooting and resolving any problem that included HP hardware or software products. Responsible for HP/UX versions 8.0 through 10.0 as well as numerous application packages including networking, software development, performance monitoring, backup, and high availability products. Performed symmetric multiprocessor kernel level debugging and low level networking trace log analysis. Installed and configured HP Openview Network Node Manager to control a complex network using new Cisco routers and Cabletron hubs.