

Year **2007-2008** Title **Principal Consultant - Database**
 Industry **Investment** Scope **Developer - Database**
 Client **System Guides (Self) Los Gatos, CA** Category **System Development**
 Project **Tracking Database for Futures Trading**
 Problem **Tools for Tracking of Futures Trading Activity.**
 Solution **In progress proprietary Futures Trading tracking software and database.**
 Mission **Iteratively design and test database and interface for logging tracking and evaluating futures trading activity.**
 Skills/Technology **Macintosh OS X, Relational Database, SQL**

Year **2006-2007** Title **Principal Consultant - Programming**
 Industry **Dental Insurance** Scope **Developer - Database**
 Client **Dentistat, Inc., Santa Clara, CA** Category **System Conversion**
 Project **Dentist Profiling System Upgrade**
 Problem **Utilization Review Profiler With Current Procedure Codes.**
 Solution **Produced rewritten and updated 26,000 lines of User Interface software for User Interface for Dental Utilization Review.**
 Mission **Reprogram 4GL applications for Dentist Utilization Review Profiler to incorporate new and changed dental procedure codes.**
 Skills/Technology **Informix Database and 4GL programming, C-programming**

Year **2005-2006** Title **Principal Consultant - Programming**
 Industry **Dental Insurance** Scope **Developer - Database**
 Client **Dentistat, Inc, Santa Clara, CA**
 Category **System Conversion**
 Project **Informix Database and Tools Conversion**
 Problem **Upgrade from Older Slower Database Tools.**
 Solution **Produced rewritten software to run on 10x faster Informix database for continuing analysis of 500 million claims.**
 Mission **Convert database, 4GL code, shell programs from Informix Standard Engine to Informix Online, for Applications, 200,000 Members, and 500 million dental insurance claims.**
 Skills/Technology **Informix Database and 4GL programming, Unix Shell scripts, C-programming.**

Year **2005** Title **Principal Systems Consultant**
 Industry **Forest Products** Scope **Leader/Facilitator**
 Client **Green Diamond Resources, Inc., Seattle, WA**
 Category **System Identification, Documentation, Facilitation**
 Project **Corporate Systems Consolidation Analysis**
 Problem **Analyze widely different IT and Operations models for divisions in 3 states.**
 Solution **Produced Consolidated Business Object Model of Operations in 3 States, with Comparative Analysis Report and Recommendations on critical similarities and differences of operating units.**
 Mission **Facilitated four one-day Workshops to identify Business Object Models for timber operations in three different states with different costs, products and operations, after a corporate reorganization.**
 Skills/Technology **Business Object Modeling, Group Process Facilitation, Workshop Leadership**

Year **2005** Title **Principal Consultant - Web**
 Industry **Non-Profit** Scope **Developer-Web**
 Client **Rural Quality Coalition, Nevada County, CA**
 Category **Web and Database Development**
 Project **Design and Build Web Site for Rural Quality Coalition**
 Problem **Design and Build Web Site for Environmental Group**
 Solution **Produced and maintain working web site of 100 pages for non-profit.**
 Mission **Build site for keeping current with ongoing community issues, Coalition policies and positions. Incorporate ten years of historical material.**
 Skills/Technology **Apache Web Server, Adobe GoLive Web Development, Macintosh OS X**

Year **2004-2005** Title **Principal Consultant - Database**
 Industry **Dental Insurance** Scope **Leader**
 Client **Dentistat, Inc, Santa Clara, CA** Category **System Conversion**
 Project **Dental Claims Database Conversion**
 Problem **Tools and Database for Handling new/changed Dental Codes**
 Solution **Produced new encoding system, converted data and management tools for 500 million Dental Insurance claims.**
 Mission **Work with subject-experts (dentists) to re-map old and new dental procedure codes and proprietary statistics. Convert tools to extract, format, clean, tabulate and load dental insurance claims data in new coding formats.**
 Skills/Technology **Informix Database and 4GL programming, C-programming, Unix Shell scripts**

Year **2003-2004** Title **Principal Consultant - Programming**
 Industry **Dental Insurance** Scope **Developer - Database**
 Client **Dentistat, Inc. Santa Clara, CA** Category **Programming**
 Project **Data Tools Conversion**
 Problem **Data Systems Upgraded to Modern Hardware**
 Solution **Produced rewritten and upgraded software converted from legacy (10-years old) to current technology.**
 Mission **Reprogram and simplify 10,000 lines of data-handling shell scripts to work with large-size hard disks.**
 Skills/Technology **Sun Solaris OS, Unix Shell scripts, C-programming**

Year **2003** Title **Principal Consultant - Web**
 Industry **Business Services** Scope **Developer-Web**
 Client **Philly CarShare, Philadelphia, PA**
 Category **Web and Database Development**
 Project **Web Sites for Philly CarShare**
 Problem **Convert Existing Code for new Web Sites**
 Solution **Produced cloned Membership Applications and Vehicle Reservations Web Sites.**
 Mission **Convert and install web pages and database for Membership Applications and Reservations.**
 Skills/Technology **UnixOS, Macintosh OS X, Apache Web Server, Relational Database**

Year **2002** - Title **Macintosh Systems Consultant**
 Industry **Education** Scope **Consultant**
 Client **Various**
 Project **End-User Coaching and Technical Support - Macintosh**
 Category **Training**
 Problem **Macintosh Systems Enabled End-Users**
 Solution **Enabled and Trained End Users for productive work on Macintosh Computers.**
 Mission **Weekly coaching and instruction, Q&A, troubleshooting. Consulting By Walking Around.**
 Skills/Technology **Macintosh Expertise from 1984 to OS X Systems**

Year **2002** Title **Principal Consultant - Web**
 Industry **Business Services** Scope **Developer-Web**
 Category **Web and Database Development**
 Client **San Francisco City CarShare, San Francisco, CA**
 Project **Member Applications Web Site**
 Problem **Website and Database for Membership Applications**
 Solution **Produced new Internet Membership Applications System Website.**
 Mission **Design and Build User Interface for web site. Link to Business Database. Build and manage secure working web site.**
 Skills/Technology **Web Servers, Relational Databases, Middleware, Apache, Unix OS, Macintosh OS X, SQL**

Year **2002** Title **Principal Consultant - Development**
 Industry **Business Services** Scope **Programmer**
 Client **San Francisco City CarShare, San Francisco, CA**
 Category **System Enhancement**
 Project **Electric Vehicle Rental Database Adaptations**
 Problem **Database Modifications for Electric Vehicle Rentals**
 Solution **Produced Modified Business Database System with features adapted for Electric Vehicle Rentals.**
 Mission **Translate Electric Vehicle Data Requirements into Business Rules. Implement rules and User Interfaces in database, middle ware and web site.**
 Skills/Technology **System Design**

Year **2002** Title **Principal Consultant - Database**
 Industry **Dental Insurance** Scope **Programmer**
 Client **Insurance Dentists of America, Saratoga, CA** Category **Programming**
 Project **Practitioner Database Retrieval Interface**
 Problem **Electronic interface, database loading and reporting**
 Solution **Produced software Retrieval System for Adverse Practitioner Reports from National Practitioner Database.**
 Mission **Build interface for retrieval of selected Practitioner Reports. Build database loading and reporting tools.**
 Skills/Technology **Java, Unix Shell scripts, Informix Database**

Year	2002	Title	Principal Systems Consultant
Industry	Business Services	Scope	Developer - Database
Client	Philly CarShare, Philadelphia, PA		
Category	System Port/Conversion		
Project	Software Applications and Database for Philly CarShare		
Problem	Convert existing Business Model, database, and software for new entity		
Solution	Produced working converted Operations Database, User Interfaces, for new Vehicle Rental company.		
Mission	Work with Founders to Identify Business Object Model changes. Specify changed systems requirements. Rewrite code for Database and User Interfaces for new company.		
Skills/Technology	Business Object Modeling, Macintosh, Unix		
Year	2001	Title	Principal Consultant - Web
Industry	Business Services	Scope	Developer-Web
Client	San Francisco City Carshare, San Francisco, CA		
Category	Web and Database Development		
Project	Reservations Web Site for CarSharing		
Problem	Vehicle Reservations Website and Database		
Solution	Produced new Internet Vehicle Reservations System Web site.		
Mission	Develop User Interface for Web Site. Link to Business Database. Build and manage secure working web site.		
Skills/Technology	Web Servers, Relational Databases, Middleware, Apache, Unix OS, Macintosh OS X, SQL		
Year	2001	Title	Principal Consultant - Programming
Industry	Business Services	Scope	Developer - Database
Client	San Francisco City CarShare, San Francisco, CA		
Category	System Design and Development		
Project	Billing System and Procedures		
Problem	Database Forms and Reconciliation Procedures for Invoicing		
Solution	Produced software tools, database, and procedures to support vehicle rental billing data reconciliation.		
Mission	Design and build spreadsheets and database for reconciliation of Reservations, Vehicle Logs, Member Usage for Billing		
Skills/Technology	Relational Database, SQL, Unix Shell scripts		
Year	2000-2003	Title	Internet Services Provider
Industry	Information Technology	Scope	Business Operations
Client	Various		
Category	Web and Database Development		
Project	Provide Web Hosting Services		
Problem	Web Hosting for Non-Profits and Startups		
Solution	Provided DNS, Web Hosting, Database and Webmaster Services.		
Mission	Provide accessible low-cost access to DNS, Apache Web Hosting and Database Services.		
Skills/Technology	Domain Name Server (DNS BIND), Apache Web Server, Relational Database, SQL		

Year	2000	Title	Principal Systems Consultant
Industry	Business Services	Scope	Leader/Facilitator
Client	San Francisco City CarShare, San Francisco, CA		
Category	System Identification, Documentation, Facilitation		
Project	Car Sharing Business Object Model Development		
Problem	Transform Business Concept into Organizational Design and Object Model		
Solution	Produced Requirements Analysis, Business Object Model of 250 entities, Database Design, Electronic Design Specs for Carsharing rental business.		
Mission	Facilitated Weekly System Identification Workshops for six months. Performed Analyses, Developed Design Alternatives, Prepared Specs.		
Skills/Technology	Workshop Facilitation, Business Modeling, Needs and Requirements Object Analysis, System and Database Design		
Year	2000	Title	Principal Systems Consultant
Industry	Business Services	Scope	Analyst
Client	San Francisco City CarShare, San Francisco, CA		
Category	System Design and Development		
Project	Database Design from Business Object Model		
Problem	Database Design for Car Sharing Business		
Solution	Produced Database Design, Dictionary, Business Rules for Car-Sharing service Startup.		
Mission	Convert Business Object Model to Database Design for Implementation. Elicit business policies, operations, rules from subject matter experts.		
Skills/Technology	Database Design, Object Modeling, Entity-Relationship (ERD) Modeling		
Year	2000	Title	Principal Systems Consultant
Industry	Business Services	Scope	Developer - Database
Client	San Francisco City CarShare, San Francisco, CA		
Category	System Design and Development		
Project	Prototype Database System for Business Operations		
Problem	Working Operations Database for Testing Model, Operations, Assumptions		
Solution	Produced Operational Prototype for Testing 75 relational database tables and User Interfaces		
Mission	Build Database Tables, Forms, Lists, Queries, Menus, User Interfaces to Implement Business Rules.		
Skills/Technology	Relational Database Expertise, SQL, Macintosh Operating Systems: 9, OS X		

Year **2000** Title **Principal Systems Consultant**
Industry **Business Services** Scope **Analyst**
Client **San Francisco City CarShare, San Francisco, CA**
Category **System Design and Development**
Project **Design Electronics Interface for Vehicles**
Problem **Remote Data Collection of Vehicle Activity**
Solution **Produced Specifications for Engineering of vehicle and communications electronics for auto rentals.**
Mission **Specify database-electronics interface for remote data collection and loading from rental vehicles. Build interface for loading into Business Database.**
Skills/Technology **Communications Protocols, Data Collection Interfaces, Shell scripts**

Year **1998** Title **Principal Systems Consultant**
Industry **Finance & Insurance** Scope **Leader/Facilitator**
Client **Legacy Marketing Group, Petaluma, CA**
Category **System Identification, Documentation, Facilitation**
Project **Life Insurance & Annuity Business Object Model**
Problem **Integrated Business Object Model for 19 separate systems.**
Solution **Produced Business Object Model of 400 entities for Life Insurance and Annuity Operations consolidating 19 different systems.**
Mission **Conduct four one-day Intensive Modeling Workshops for 20-person team. Prepare Model Diagrams and Documents on the fly. Instruct, facilitate, negotiate priority selections.**
Skills/Technology **Business Object Modeling, Group Process Facilitation, Workshop Leadership**

Year **1998** Title **Principal Consultant - Database**
Industry **Dental Insurance** Scope **Leader**
Client **Insurance Dentists of America, Saratoga, CA**
Category **System Design and Development**
Project **Customized Counseling Letter Generation**
Problem **Convert Manual System to Customized Counseling Letters**
Solution **Produced standardized codes and texts, programmed and delivered working system to Generate Counseling Letters to Dentists**
Mission **Worked with content-experts (dentists) to capture professional utilization review comments for encoding into 300 distinct review responses. Built & programmed database and custom tools for generation of counseling letters to dentists. nationwide.**
Skills/Technology **Workshop Facilitation, Programming, Informix Database, SQL**

Year **1998** Title **Principal Consultant - Programming**
 Industry **Business Services** Scope **Programmer**
 Client **University ProNet, Inc. Palo Alto, CA**
 Category **Programming**
 Project **Web Site - Database Interface**
 Problem **Tools for Loading Resumes from Web Site**
 Solution **Produced production program for data conversion and loading of 50,000 resumes.**
 Mission **Programming for formatting and loading resumes into both structured and free-form search tool**
 Skills/Technology **BRS Full-Text Search tool, Unix Shell scripts, Netscape Server**

Year **1997** Title **Principal Consultant - Programming**
 Industry **Dental Insurance** Scope **Leader**
 Client **Dental Insurance Consultants, Inc., Saratoga, CA**
 Category **System Enhancement**
 Project **Electronic Handling of X-Rays**
 Problem **System to receive, store, display, print Dental X-Rays electronically.**
 Solution **Produced working integrated software and hardware for managing electronic dental X-rays.**
 Mission **Identify, evaluate, select off-the-shelf components for handling and display of dental X-Rays, Integrate into working system for dentist reviewers.**
 Skills/Technology **Unix Shell scripts, Macintosh, Adobe Photoshop, Acrobat**

Year **1997** Title **Principal Consultant - Programming**
 Industry **Business Services** Scope **Programmer**
 Client **University ProNet, Inc. Palo Alto, CA** Category **Programming**
 Project **Automate Resume Disks Loading**
 Problem **Batch Handling of Resumes on Floppy Disks**
 Solution **Produced software for automatic reading and loading of floppy disk resumes.**
 Mission **Develop tools for automatic reading and database loading of resumes submitted on floppy disks.**
 Skills/Technology **Informix Database, SQL, Unix OS, Macintosh, Windows, C-programming**

Year **1997** Title **Principal Consultant - Programming**
 Industry **Business Services** Scope **Programmer**
 Client **University ProNet, Inc. Palo Alto, CA** Category **Programming**
 Project **Integrated Interface for Alumni Resume Searching**
 Problem **Informix 4GL User Interface for Alumni resumes**
 Solution **Produced 4GL User Interface software to query and manage Alumni resumes.**
 Mission **Write 4GL programs for access to Alumni Resume Database**
 Skills/Technology **Informix Database and 4GL programming**

Year	1996-1997	Title	Principal Systems Consultant
Industry	Dental Insurance	Scope	Leader
Client	Dental Insurance Consultants, Inc., Saratoga, CA		
Category	System Design and Development		
Project	Cost Savings Reporting System		
Problem	Automated Cost-per-Claim and Savings Reports		
Solution	Produced Monthly Cost Savings Reporting System on 200,000 claims reviewed per year, operating in 5 US regions.		
Mission	Work with content-experts (dentists) to evolve detailed cost savings per dental procedure reviewed. Build application for generation of review letters. Integrate with Coded Responses Collection System.		
Skills/Technology	Informix Database, SQL, Unix Shell scripts		
Year	1995	Title	Principal Systems Consultant
Industry	Finance & Insurance	Scope	Leader/Facilitator
Client	Transamerica HomeFirst, San Francisco, CA		
Category	System Identification, Documentation, Facilitation		
Project	Reverse Mortgages Business Object Model		
Problem	Integrated Business Object Model for Reverse Mortgages		
Solution	Produced Business Object Model of 300 entities, for Reverse Mortgages, with priorities for implementation.		
Mission	Conduct four one-day Intensive Modeling Workshops for 12-person team. Prepare Model Diagrams and Documents on the fly. Instruct, facilitate, negotiate for priority setting.		
Skills/Technology	Business Object Modeling, Group Process Facilitation, Workshop Leadership		
Year	1994-1995	Title	Principal Systems Consultant
Industry	Dental Insurance	Scope	Leader
Client	Dental Insurance Consultants, Inc., Saratoga, CA		
Category	System	Design and Development	
Project	Automated Claim Response Generator		
Problem	Claim Reviews Coding and Response System		
Solution	Produced working Database, Dental Insurance Claim Coding sheets, and User-Interface system supporting 200,000 claim-reviews per year.		
Mission	Work with content-experts (dentists) to develop coding of 400 possible professional responses to insurance claims. Build applications to accept and report coded and open-ended reviews.		
Skills/Technology	Informix Database, SQL, Macintosh OS, Unix OS, C-programming		

Year **1994** Title **Principal Systems Consultant**
 Industry **Forest Products** Scope **Leader/Facilitator**
 Client **Simpson Timber Company, Seattle, WA**
 Category **System Identification, Documentation, Facilitation**
 Project **Timber Operations Business Model**
 Problem **Integrated Business Object Model for Timber Systems Overhaul**
 Solution **Produced Business Object Model of 250 entities for Timber Operations.**
 Mission **Conduct two 4-day Intensive Modeling Workshops for 10-person team. Prepare Model Diagrams and Documents on the fly. Instruct, facilitate, negotiate.**
 Skills/Technology **Business Object Modeling, Group Process Facilitation, Workshop Leadership**

Year **1994** Title **Principal Systems Consultant**
 Industry **Forest Products** Scope **Leader/Facilitator**
 Client **Simpson Lumber Company, Seattle, WA**
 Category **System Identification, Documentation, Facilitation**
 Project **Lumber Operations Business Object Model**
 Problem **Integrated Business Object Model for Lumber Systems Overhaul**
 Solution **Produced Business Object Model of 350 entities for Lumber Operations.**
 Mission **Conduct two 4-day Intensive Modeling Workshops for 12-person team. Prepare Model Diagrams and Documents on the fly. Instruct, facilitate, negotiate.**
 Skills/Technology **Business Object Modeling, Group Process Facilitation, Workshop Leadership**

Year **1992-1994** Title **Principal Consultant - Programming**
 Industry **Dental Insurance** Scope **Programmer**
 Client **Dental Insurance Consultants, Inc., Saratoga, CA**
 Category **Programming**
 Project **Enhanced Claim Review Analysis Tools**
 Problem **System to Select Practitioners for Enhanced Claim Review**
 Solution **Produced software system for periodic Reporting of Selected Practitioners exceeding statistical thresholds.**
 Mission **Develop algorithms, database tables, write Informix 4GL and C-programs for custom data analysis.**
 Skills/Technology **Informix Database and 4GL programming, C-programming, Statistical Analysis of Large Data Sets**

Year **1989-1991** Title **Systems Consultant**
 Industry **Transportation** Scope **Instructor Analyst**
 Client **DHL, Inc., San Mateo, CA**
 Category **System Identification, Documentation, Facilitation**
 Project **DHL Worldwide Billing System Analysis**
 Problem **Analysis and Documentation of Billing Operations**
 Solution **Provided Structured Analysis Methodology Training and Application to Worldwide (Multi-Country) Billing Project**
 Mission **Consult on Structured Analysis Methodology and documentation for Billing Operations analysis.**
 Skills/Technology **Data Flow Diagram, Dictionary, Structured English Methods**

Year **1988-1991** Title **Principal Consultant - Database**
Industry **Dental Insurance** Scope **Developer - Database**
Client **Dental Insurance Consultants, Inc., Saratoga, CA**
Category **System Design and Development**
Project **Insurance Claims Tracking Database**
Problem **Claims Review Tracking Database Conversion from Paper**
Solution **Produced working claims database, user interface, 50 tracking
billing and management reports, operating in 5 regions cover-
ing the US.**
Mission **Design and Build Database for Logging, Tracking, Status, In-
voicing and Reporting of dental insurance claims submitted for
professional review.**
Skills/Technology **Macintosh OS and Relational Database**

Year **1988** Title **Instructor**
Industry **Information Technology** Scope **Leader/Instructor**
Client **Basic Software Services, Inc. Hayward, CA** Category **Training**
Project **Lead Training Workshops in Structured Analysis**
Problem **Staff Training for New Project**
Solution **Trained 20 staff members in Structured Analysis.**
Mission **Lead workshop-class of 20 staff in methods of Structured
Analysis, applied to existing project; 5 one-day sessions.**
Skills/Technology **Structured Analysis Methodology, Workshop Facilitation**

Year **1988** Title **Leader/Instructor**
Industry **Information Technology** Scope **Instructor**
Client **Basic Software Services, Inc. Hayward, CA** Category **Training**
Project **C-Programming Debugging Methods**
Problem **Train Technical Staff in Good C-Programming**
Solution **Trained 10 programmers in methods for Debugging C-programs.**
Mission **Present classes and exercises in Advanced C-programming,
focused on good practices for debugging.**
Skills/Technology **C-programming, Structured Methodologies**

Year **1988** Title **Instructor**
Industry **Information Technology** Scope **Instructor**
Client **Basic Software Services, Inc. Hayward, CA** Category **Training**
Project **Teach 12-hour Class in Relational Database Design**
Problem **Train 20 Staff in Principles of Relational Database Design**
Solution **Trained Project staff to methods design and build Relational
Databases for conversion of existing applications.**
Mission **Present 12-hour class on Relational Database Design methods.**
Skills/Technology **Relational Databases and Methods**

Year 1985-1990 Title **Principal Consultant - Database**
Industry **Dental Insurance** Scope **Senior Programming Team Member**
Client **Insurance Dentists of America, Inc., Saratoga, CA**
Category **Programming**
Project **Database Conversion and Expansion Programming**
Problem **Convert legacy system and add applications**
Solution **Produced programming for new-generation technology providing expanded custom data services available as company products.**
Mission **Convert legacy applications to 4GL. Design and build Informix Database and User Interface for Applications, Membership, Insurance Claims Data Handling and Statistical Analysis. Estimated 100k LOC.**
Skills/Technology **Informix Database and 4GL programming, Database Design**

Year 1983-1990 Title **Leader/Instructor**
Industry **Education** Scope **Instructor**
Client **Golden Gate University, San Francisco, CA** Category **Training**
Project **Teach 12-hour Systems Classes**
Problem **Design and Present Classes in Systems subjects**
Solution **Developed and Presented Classes in Systems Analysis, Relational Database Design, C-Programming.**
Mission **Develop course materials, present in weekly 3-hour blocks. Structured Systems Analysis, Relational Database Design, C-Programming.**
Skills/Technology **Structured Systems Analysis, Relational Database Design, C-programming**

Year 1983-1984 Title **Programmer, Unix, C**
Industry **Technology** Scope **Programming Team Member**
Client **The Systems Group, Inc., Santa Clara, CA** Category **Programming**
Project **Test Suites for Unix Ports**
Problem **Test Development to Validate Unix Ports to new CPUs**
Solution **Participated in C-programming of 3 Test Suites to exercise CPU's on ported Unix code.**
Mission **Identify and program Test Cases to exercise low- and high-level Unix system code. for Intel, Motorola, National Semi CPU's. Write Testing Suite Harness for Tests management.**
Skills/Technology **Unix OS, C-programming**

Year 1980-1983 Title **Vice President**
Industry **Technology** Scope **Business Operations**
Client **Berkeley Systems Works, Berkeley, CA**
Category **Project Management**
Project **Speech Synthesis Research and Prototype**
Problem **Develop Hardware and Software for Speech Synthesis**
Solution **Management and Administration of 10-person technology startup.**
Mission **Provide Management and Administration services as company grew from 1 to 10 linguists, engineers and programmers building Speech Synthesis prototypes for Matsushita, Inc.**
Skills/Technology **Project Management, Electronic Engineering, Unix Systems Administration**