

# Daniel Sternklar

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Daniel Sternklar has over 28 years experience in scientific and commercial data processing. Daniel Sternklar has impressed clients with the depth, breadth, creativity and quickness we regularly demonstrate on even our most technically challenging assignments. This includes real-time computer controls, specialized computer monitoring systems, networks, graphic and image processing, object oriented software development and application of database technology. This expertise provides the background required to operate from the lowest machine level code to artificial intelligence-based development systems. This experience provides Daniel Sternklar the ability and background to choose the right tools for the job.

## *Capabilities*

Needs and workflow analysis, software design and development, training, support, security audits, software and hardware recommendations. Coordinated and managed development among developers who were geographically separated by hundreds and thousands of miles. Unique use of telecommunications and software version tracking was implemented. Written documentation and proposals. Executive technical advisor. Co-development with MIS staff of various clients. Conducted classes for non-computer literate personnel as well as data processing professionals. Administered complete client satisfaction as a “word-of-mouth” marketing campaign. Presided on software and hardware manufacturer committees to determine needs and future directions. Alpha and beta test new hardware and software. Administration of LAN , WAN , and VPN's. Secure workstations and servers from malware, virus, spam, and hacker attacks. Perform pen-tests on servers and workstations using various tools such as nmap, TCP-Dump, Nikto, Hydra, and more.

# Sample Projects

## **Linux web server administration**

Configured cpanel, apache, php, pop3, ftp , exim, bind, mysql, spamassassin, clamd, sshd services. Set up mod security and spamassassin rules. Installed various opensource blogs, galleries, portals, and teamwork applications. Analyzed various server logs such as ftp, apache, mod security, messages, maillog, error logs for unauthorized accesses as well as for server efficiencies. Set up e-commerce applications with payment gateways and ssl certificates. Set up iptable entries to block ip addresses of spammers, bots, hackers, undesired countries etc..

## **Help Desk and Network Administration**

Secured desktop computers by installing anti-virus, anti-spyware, firewall, various security updates and other software. Performed updates of windows, software drivers, and Microsoft office software. Disinfected computers infected by various spyware, virus, rootkits, trojans, and other malware Recovered data off of damaged hard drives using recovery tools, sector editors and forensic tools. Built custom desktop and server computers. Configured wireless and wired networks. secured wireless routers. administrative liaison between ISP and clients. Microsoft exchange administration. provided application support. solved problems for users at various skill levels. analyzed server logs for unauthorized access. Secured ports on servers, routers, firewalls, and workstations.

## **Video and image encoding, compression and streaming content**

Provided video and image encoding, compression, watermarking, and streaming content services for various websites and intranets.

## **Website Template Technology**

Created web template technologies that would enable non-computer literate users to update their own corporate web content. Areas such as news, events, job announcements, images, and more could be updated by simply filling in a webform. The database engines behind the website would then dynamically create webpages for visitors to the site.

## **Website Design and Integration**

Developed, designed and Implemented various intranet/internet web sites using the latest internet technologies. Java Applets, ActiveX, Netscape Plugins, Streaming video/audio, VRML, Active Server Pages, Onlive Servers, database integration, Domino, PHP, MYSQL, animated agents, and more were utilized. Animated agents were used to allow the visually impaired to have the website content read to them, and also functioning as, tour guides and teachers.

## **Conversion of Revelation financial application to an Oracle ASP database system**

Developed methodology and procedures to convert a Revelation system to Oracle. Remapping of data structures, new interest calculations, intelligent agent cleansing of inaccurate data, and dual system testing were among the many tasks. Ongoing support and enhancement of the revelation application was also a requirement.

## **Advanced Revelation Document Tracking System**

Interacted with over 20 users and various department heads and project managers to upgrade, debug, and support an Advanced Revelation document tracking system. Innovative audit techniques, indexing, and user input workflow were developed. Critical reports were generated to prove government regulations and compliance to congressional mandates were adhered to.

## **Managed Care Workflow Automation**

Developed a suite of products utilizing proprietary event-based scaleable parallel processing, and data harvesting and reporting technology that brings automation to the managed care administrative process. Parallel processing refers to the powerful capability for PCs to share the load of processing transactions, running reports, executing business rules, executing mass communications (e-mail, faxing, mail merges). These products help to achieve significant cost savings through head count reduction of administrative personnel and operating efficiencies that benefit insurers, provider networks and their respective enrollees.

These products provide what is normally considered mainframe mission-critical power for its unique managed care activities such as:

- Harvesting authorization requests entered via touch tone phone

- Harvesting, processing, and automatically adjudicating claims entered via touch tone phone.

- Continual creation of management reporting information customized to each division's specifications.

- Execution of large numbers of automated business rules, e.g., route automated e-mail and history when a patient is admitted to hospital; escalate a customer service case if not completed in X number of hours/days.

- Atomic Structure. Granular events are the building blocks for automating workflow and creating Corporate Memory for all Paradigm 7 software modules. Each event record has timestamp (effective and end date/times), user, security, and rule execution information embedded. The following are examples of events:

- Linking of a name to roles, organizations, categories, addresses, etc. When any of these attributes change over time, older versions are end-dated, new ones have new effective dates, and the indexing system adjusts to the new view.

- Requesting or executing any type of communication including mail, fax, e-mail, paging, setting up a meeting between people or automated processes.

- Opening or closing a "Case" to be tracked and completed. Each case manager's response, action, etc.

Secure "Corporate Memory." Each record (Events, Names, Addresses, Roles, Cases, Providers, Claims, Fees, Benefits, etc.) in the system has time-stamp, security, routing, and rule execution information embedded when it is created. Updates are new versions with new effective dates (all date/time information is stored internally in UTC, Universal Time).

Customizable Intelligence. Each access of a record (read, write, delete) is intercepted by the rules engine before presentation to a user or before written to disk. System rules and custom rules are then processed, some in real time, some delayed for later execution.

Scaleable Parallel Processing. Accommodates the large numbers of rules that might be queued up to be executed. If an additional PC or PCs are added to increase processing power, TPS agents automatically start sharing tasks with the newly joined member(s). OpenInsight, Advanced Revelation, Visual Basic, SQL Server, Show and Tell were the development environments. Integration

with Windows API's, Novell NLM, NT Services, Computer Telephony, and Winsock calls were required.

### **Training Tracking and Evaluation System**

Developed and designed new capabilities for a corporate training and evaluation system. OpenInsight was the development environment. Novell networking was used. Provided support and debugging for users. Client data was converted from various other databases into the system.

### **PowerPay Software HR/Payroll System/Ceridian**

Designed, developed, tested, and converted a complex tightly integrated sequential Advanced Revelation application to an object oriented event driven Windows application environment called Openinsight. Development included dataset objects, low level select tools, windows API and DLL integration, user interface design, payroll disbursement and human resource system and more. This team project included working with other developers, clients, documentation and marketing personnel. Novell networking was used.

### **Service Operations System**

PC Single user or network package which includes Service Request, Work Order, Field Reporting, Invoicing, and Historical Tracking. Unusual Integration between Inventory & Installation modules with still video images of parts and installation techniques. This software package was developed with the cooperation of twelve different clients. Advanced Revelation and OpenInsight were the development environment. Client data was converted from various other databases into the system. Novell networking was used. C and assembler programming used for multimedia integration. Customer demographics and other data was integrated with the MapInfo environment.

### **Payroll**

Integrated data between legacy systems and PC HR systems.

### **Crime Reporting Information System**

Crime scene incident reporting and statistical summaries for federal reporting for several law enforcement agencies. Revelation and Advanced Revelation was the development environment. Client data was converted from various other databases into the system.

## **Health Care Marketing Utilization System**

Raw mainframe data was converted into management reports. Patient demographics, Operating room logging, DRG statistics, Procedure statistics, Insurance provider tracking, and profitability reports . Software was used by several hospitals and market research firms. Revelation and Advanced Revelation was the development environment. Lotus 123 was integrated with the revelation data to allow data analysis. Novell networking was used.

## **Medical Records Activity Tracking**

PLC conveyor data from different parts of the hospital was used to generate medical records volume data. Revelation and assembly language was the development environment. Novell Networking was used.

## **Standard Operating Procedure Document Tracking**

Revision dates, Procedure merit, Station utilization, and many other statistics organized in a useful form for many critical decisions. Software was used for the federal government. Advanced Revelation was the development environment along with integration with Word and WordPerfect. Novell networking was used.

## **Wind Tunnel Data Acquisition & Data Reduction**

Real-time analysis of tunnel data including heat transfer and other aerodynamics parameters. Developed methods to display analysis graphically. Assembly language was the development environment.

## **Hypnotist**

Innovative mass marketed program for the home which included habit modification, super-learning, biofeedback, and regression. Assembly language and basic was the development environment. Various graphic and audio design tools were used as well.

## **Computer Animation, Modeling and Multimedia applications**

Many Original 2D and 3D computer animations that were used for broadcast or in industrial Videos. Custom kiosk information systems design and implementation. Various multimedia tools used.

## **Virtual Reality Applications Pioneer**

Devised an original approach to Virtual Reality Applications that utilize a "second-person unencumbered" interface. Applications include Virtual worlds connected via satellite, physical therapy, entertainment, education and more. Proprietary environments were created and used.

## **Interactive Agent Technology Pioneer**

Animated desktop agents implemented in various client applications to inform and respond to user requests.

## **Stereoscopic Video Production**

Using leading edge technology to produce 3d videos and 3d imagery.

# ***AREAS OF EXPERTISE***

## **Hardware:**

IBM PC's and Compatibles, Novell LAN, Amiga, Universe 68, voice recognition systems, routers, and desktop video.

## **Operating Systems**

MSDOS, Windows, Windows 95, Windows NT 3.51, Windows NT 4.0, Windows 98, Windows XP, Windows 2000, Windows 2000 server, Windows 2003 Server, Linux, Caldera, Novell LAN, NT Networking, and OS/2

## **Application Environments**

Revelation, Advanced Revelation, OpenInsight, MySQL, PHP, CMS, SQL client/server, Visual Basic, DCOM, Java Applets, VBScript, REXX, HTML, Delphi, Machine Language, Dbase, Rbase, Q&A, Paradox, Mapinfo, and Lotus Notes.

## **Internet Environments**

Microsoft Visual InterDev, Microsoft Visual Studio, Microsoft FrontPage, Macromedia UltraDev, Macromedia Flash, PHP, ASP, MYSQL, HotDog Professional, ShockWave, Vivo Professional Tools, Mbed Interactor, Various web Page/VRML Editors, Java Applets, VBScript, JavaScript, IIS; Netscape; Domino Web Servers.

## **Multimedia and Image Processing Environments**

DVD authoring, Newtek Video Toaster NT 2 NLE video suite, Lightwave 3D, Cleaner video encoding tools, RealProducer, Quicktime Pro, Adobe Photoshop, Adobe Premiere, Flash, ULead Cool3D, PhotoImpact, India Pro, Art Department Professional, Deluxe Paint IV, Bars & Pipes Professional, Image Master, Sculpt 4D, Amigavision, Foundation, HyperCard, DrT. Copyist & Universal Librarian, Pagestream Desktop Publisher, AREXX Task programming language.

## **Security and Forensic Tools**

nmap, TCP-Dump, Nikto, Hydra, PHLAK, Operator, Backtrack, netstumbler

## **Anti-Virus/malware/spam Tools**

rkhunter, Avast, AVG, Symantec, Adaware, Spyware terminator, Panda, Zone Alarm and many more

## **Commercial Computer Wide Area & Database Network Systems**

Compuserve, GENIE, BIX, Portal, Delphi, Lockheed DIALOG, Watson Voice Mail system Programming and integration with database.

## **Teaching Experience**

Advanced Revelation and OpenInsight Classes for users as well as DP Professionals. Computer literacy classes. DeskTop Video and Multimedia uniquely designed 12 week course. Introduction and advanced internet training including web navigation, workflow collaboration, Video Conferencing, 3d Space Navigation and Creation, and plugin capabilities.

## **Digital Dictation and Voice Recognition System**

Installation and configuration of the Unified Voice Network Dictanet System.



## **Unique Visual Basic and Microsoft Tools Expertise**

1. Implement User Interfaces for various applications. This included extending the capabilities of Visual Basic by combining the usage of various Third party tools.
2. Visual Basic was also used in connecting databases and computer telephony systems together.
3. ActiveX controls and ASP web page implementations.
4. VBScript web pages.
5. Interaction with Microsoft Office and applications.
6. Implementation of graphics libraries to visualize data.
7. Database Reporting.
8. Utilize Microsoft Agent technology in custom applications.
9. Managed various software development staffs using Visual Studio.