

Detailed Work History

SAIC (September 2022 - present)

Title: Software Principal III

Location: Remote

Website: <https://saic.com>

Clearance: SECRET

Full-time: Yes

Roles:

- Software Engineer
- Cloud Administrator
- Database Administrator

Designed and developed data management and data archival procedures for government customer. The customer had 20+ years of experimental data (many terabytes). Project team was formed to archive old data and build systems to automate collection and analysis of on-going and future experiments. The project used Google Cloud Platform and customer proprietary systems.

During my tenure in this job I worked on GCP buckets, MySQL, Linux/Windows VMs, HyperThought, Jira, daily standups, led sprint reviews and retrospectives, LaTeX, BibTeX, Python, NginX, Flask/Python, Blazer, C#, and Visual Studio Code.

This job required a background check and SECRET level clearance.

SAIC/SERCO (September 2010 - September 2022)

Title: Software Principal III

Location: Metairie, LA 70125

Website: <https://saic.com>, <https://www.serco.com/na>

Customer: FRTIB

Clearance: Public Trust

Full-time: Yes

Roles:

- Software Engineer
- System Administrator
- Database Administrator

Part of a small team that supported the development Linux servers, web servers, network, and databases for the federal retirement system. Responsible for the migration of applications to the test and production environments and support of issues in production. Primary development work was in Perl and JavaScript and Linux shell scripts.

Feb 2014 - September 2022 [SAIC](#) is a contracting company that primarily supports government agencies. SAIC won a rebid of the agency support contract in 2014 and I was hired to continue my previous duties.

September 2010 - January 2014 [SERCO NA](#) is a government contractor.

Initially the position included software development, system administration, and network duties including support of production servers and the firewall. In 2012 a reorganization siloed the staff into more specific areas and I moved to primarily software/systems

development with limited test and production support.

Duties included design and development of data processing and migration scripts on Linux system, and database schema and procedures on MySQL servers. Built a library of Perl modules and application templates specific to our environment to make data migration between our servers more maintainable and faster to build. The library continued to be used until the end when all the servers were decommissioned in 2022. Designed and developed email screening scripts for automated processing. Designed, developed and maintained web based financial applications in JavaScript using Highcharts. I built multiple stored procedure libraries to isolate schema design from the development team and form a consistent API to the data and improve the ability to replace systems.

In 2018 the customer decided to migrate tsp.gov from Cascade to Federalist. The initial team of government employees included a UX designers, content managers, and a project manager. An initial migration of the content was performed by 18F and in April 2019 I was added to the team (as the only contractor) to customize the site to our specific Agency's needs. The site was built on [GitHub](https://github.com) using Jekyll, Liquid, and JavaScript. The final product went live to the public in July 2020.

In December 2021 I was tasked with migrating fritib.gov from Cascade to Federalist. Along with a UX designer I migrated the site and it went live April 8, 2022.

I was the sole software development and support resource for the public web site content, Highcharts, Cascade and its variant of Apache Velocity, and the Agency's use of GitHub.

ONGO Live Inc (May 2008 - September 2010)

Title: Software Engineer Lead
Location: Metairie, LA 70125
Website: <http://www.ongolive.net>

Full-time: Yes

Roles:

- Software Engineer
- System Administrator
- Database Administrator

ONGO Live was a small company that installs mobile DVRs into vehicles to allow remote viewing and limited control of the vehicle.

At ONGO I was the primary resource for all software maintenance and development. This included custom programming of the DVR (PC running embedded XP) and the central management server.

Primary duties included software development in Python, database administration and SQL development in MySQL, and PHP development for an Apache web server. For one small project I implemented a SOAP interface into the existing web server remotely to locate vehicles after Katrina. Also worked as a backup for assembly, installation and maintenance of the DVR device. Hired and managed part-time and intern staff for development.

Aym Business Consulting (February 2007 - May 2008)

Title: Software Engineer
Location: New Orleans, LA 70125
Website: <http://www.aymbus.com>

Full-time: Yes

Roles:

- Software Engineer
- System Administrator
- Database Administrator

Aym Business Consulting is a small company that develops, installs, and maintains business software for businesses in the distribution industry. The software handles inventory, payroll, taxes, ordering as well as point of sale for wholesale, retail or mixed mode, in real time, across multi-state locations.

One of two employees for all aspects of software and database design, software maintenance and quality assurance as well as documentation and customer support. Developed interfaces for point-of-sale hardware devices (cash register, barcode scanner, receipt printers, etc). At various times I did a bit of everything except sales and company finances.

My primary duties included retooling the current VB 6.0 application in VB.NET, performing day-to-day system administration duties, and SQL query design. In my development role I worked primarily in VB.NET, SQL Server, and Active Reports.

Planning Systems Inc. (July 2006 - January 2007)

Title: Contractor

Location: Stennis Space Center MS, 39529

Website: <https://www.plansys.com/>

Customer: METOCCOM, NAVY

Clearance: SECRET

Full-time: Yes

Roles:

- Software Engineer
- System Administrator
- Database Administrator

Planning Systems Inc. (PSI) was a consulting company that works extensively with the US Government. The USN METOC Command is in charge of weather reporting for all of the Navy. Specifically it provides weather forecasts for Navy planes and ships all over the world. The work includes both Unclassified (CONUS flights) and Classified (weather reports before and during ship/troop movements) aspects.

As a PSI contractor I was hired as a system administrator for both the classified and unclassified US NAVY networks. Primarily my job was to develop central systems (i.e. chat program between ship and shore on classified network) that serve all Navy and to maintain existing systems such as the welcome screen displaying world weather data at the Stennis welcome center. This job required travel to Navy bases to document and test systems as well as installation, updating and security hardening/testing of existing systems. This job required a background check and SECRET level clearance.

TekSystems (April 2006 - June 2006)

Title: Contractor

Location: Stennis Space Center MS, 39529

Website: <https://www.teksystems.com/>

Customer: National Data Buoy Center, NOAA

Clearance: background check

Full-time: Yes

Roles:

- Software Engineer
- System Administrator
- Database Administrator

TekSystems is a contracting company that focuses on contract to hire positions. The NDBC is a department of NOAA that receives weather data from data buoys deployed all over the world. The data can be view here: <http://www.ndbc.noaa.gov/> The buoy center is managed by contract to SAIC, another governmental contracting agency. As a TekSystems contractor I was hired by SAIC to work in NDBC to do C programming on the legacy data system that receives and reformats data for the web site above. Because of their scheduling priorities and my background, I was quickly moved to web server projects that used Perl, PHP, and Oracle. I was hired to fix bugs logged in their bug tracking system but because of my history working directly with scientists (Paradigm Genetics) to develop applications based on the underlying science I was shifted to new work. The contract was discontinued for budgetary reasons

(between SAIC and NOAA) on July 1st at start of their fiscal year before the contract completed. This job required a full background check because the office was on a government facility but did not require clearance.

Icoria, Inc. (Paradigm Genetics) (April 2001 - January 2006)

Title: Systems Architect

Location: Research Triangle Park, NC 27709

Website: <https://www.icoria.com/>

Customer: Various

Full-time: Yes

Roles:

- Software Engineer
- System Administrator
- Database Administrator

Paradigm Genetics, Inc. was a biotech startup company formed in late 1997. The company focused on discovery of gene function in both plant and animal systems. The initial concept was to determine gene function in an assembly line methodology and then sell these potential (pre-screened) gene targets to other research companies. On August 17, 2004, **Paradigm Genetics, Inc.** changed its corporate identity to **Icoria, Inc.** In late 2005 Clinical Data acquired Icoria Inc and the bulk of its operations were shut down or retooled in January 2006.

I was an employee of Paradigm for 7.5 years and had several distinct jobs at the company as its focus and business plan changed. I was hired as a software developer when the company had just 40 people (just 6 in the Information Technology group). Because of my system administration experience I also worked as system admin setting up servers and infrastructure for the first few months. In November 1999 I moved into a management role within the IT group as the department moved to 40 people and the company grew to over 200. I did this job for over a year managing hardware and budgets. In April 2001 IT reorganized and I moved back into a purely technical position as one of 4 technical design leaders for the company. I became the system architect and was responsible for design and implementation of all interfaces between our software and integrated 3rd party applications. In mid-2002 I moved to a failing project when its lead left the company. I not only fixed the problems but I designed a drastically improved solution and the project became my primary responsibility.

April 2001 – July 2002

Responsible for the integration of in-house and 3rd party software into a multi-server UNIX environment. Worked with clients and vendors to resolve technical issues during design phase of software development. Acted as mentor and technical guide to developers in the software engineering and Bioinformatics departments. Worked with UNIX system administrators to create, implement and document configuration standards of server systems to insure reliability. Managed the change control system for the entire company. Served on a 4-member architecture team to apply software engineering principles to all aspects of our informatics systems. Participated in interviews for information technology positions.

July 2002 – January 2006

My job title and duties as system architect defined below did not officially change in 2002 but my focus and day-to-day activities did. I still performed the other duties but a new task became my top priority. In 2002 I was assigned to a failing project. It worked but was unusably slow. The initial design worked but with real data it did not meet processing requirement. My task was to optimize it and make it useable. For the rest of the year, I worked on it with the external development team, optimized the algorithm and met the goals.

In doing that work I came up with a better solution. I made a proposal to management to recode the system with a new design. I was given approval to try my idea once the current project was installed and in use. For the first three months of 2003 I built a prototype replacement. The new system processed data a full order of magnitude faster! My new design was so successful it was decided that we would reengineer the whole system and build it to a higher standard. I was an advisor and architect on that team but my main focus remained development of the prototype and the algorithm. While the team built the new system, I worked with the users using the prototype to develop it further. Over time, my prototype became the development environment and my completed code was handed to the team for the production system as a blueprint for their work. Eventually my solution gained another order of magnitude speedup over the original design. Icoria was attempting to patent the system and algorithms when it was bought out. Clinical Data had no interest in continuing the work and sold the project to another company. In 2007 I consulted with that company to integrate the project into their system but I was living in Louisiana and moving back to North Carolina wasn't an option for me. They decided to retain the method as a trade secret and did not pursue the patent.

Paradigm Genetics Inc. (November 1999 - March 2001)

Title: Director of Data Systems & Algorithms

Location: Research Triangle Park, NC 27709

Website: <https://www.paragen.com/>

Customer: Various

Full-time: Yes

Roles:

- Software Engineer
- Database Administrator

Managed the Data Systems and Algorithms group within the Informatics division. This group was responsible for database, data structure, and algorithm development and optimization. The company had grown to over 400 employees with 40 in the Informatics department. Worked in a group of 5 managers reporting to VP of Informatics to create (yearly) and manage (monthly) the IT budget. My department had a yearly budget from \$500K to \$1M and was under budget each month. Participated in executive level group meetings to plan direction of research branch of the company. Responsible for interviewing and hiring Informatics staff and participated in a company wide meetings with managers for yearly review of employees.

The DSA group was disbanded and reorganized at my request when the company growth plan changed.

Paradigm Genetics Inc. (July 1998 - October 1999)

Title: Software Engineer

Location: Research Triangle Park, NC 27709

Website: <https://www.paragen.com/>

Customer: Various

Full-time: Yes

Roles:

- Software Engineer
- System Administrator
- Database Administrator
- Network Administrator

I was hired to be one of two software developers in a small biotech company of 40 people working with a system administrator and database administrator. Because of my previous work history as a system administrator my initial tasks included assigning the system and database administrators in setup and integration of much of the IT infrastructure. (Firewall, NFS, public web site, printing, etc.) Worked with project manager (NT administrator) in setting up timelines and plans for integration of initial 3rd party tools into our environment.

Responsible for development of post-laboratory software and data analysis tools including all functions of a Bioinformatics department. Applications were primarily written in Perl. Worked closely with PhD level scientist to perform data analysis for research and data delivery to customers. Served on the Patent Review Committee representing the Informatics department to review company work for possible patent opportunities and to develop company policies for patents.

Project manager for one of the only two major customer deliveries ([AgDB-Bayer](#){: target="_blank"}) in first 18 months of the company.

Security First Technologies (October 1997 - June 1998)

Title: System Administrator

Location: Atlanta, GA 30326

Website: https://en.wikipedia.org/wiki/Security_First_Network_Bank

Full-time: Yes

Roles:

- System Administrator

S1 was the first 100% internet bank. The company was a spin off from HP that developed software to run a bank on the web. It opened a bank to demonstrate its software to potential clients. I was one of two to four system administrators responsible for daily maintenance of 15+ HP-UX systems with varying software versions. I was primarily assigned as a system administrator to the software development group. Responsible for design of installation procedures to support development servers. Maintained and installed QA servers running HP's VVOS. Installed and managed 3rd party software tools (Informix, Tuxedo, Netscape, Forte), system patches and system maintenance scripts. Created and documented the installation procedures to insure a well defined and consistent development platform.

HomeCom (June 1997 - September 1997)

Title: Web Developer & System Administrator

Location: Atlanta, GA 30305

Website: <https://www.homecom.com/>

Full-time: Yes

Roles:

- Web Developer
- System Administrator
- Intern

HomeCom was a small company making website for small businesses when the world wide web first started getting popular. They were a hosting company that did well with a few successful clients (Brinker Inc and Time Warner Cable). I joined HomeCom as a summer intern while I was in graduate school at GA Tech. When I was hired they had 100 employed. Three months later when I left I was the only system administrator and they had fewer than 15 employees.

Designed, developed, and maintained new applications, UNIX scripts (csh and Perl), CGI applications, forms and post on the fly applications, and support libraries for web applications. As senior developer (while an intern), performed code reviews and QA duties as well as debugging and mentoring for development staff. Designed, developed and maintained automated UNIX scripts for customer support on a new project for a fortune 100 company. Real users were using the system 2 weeks after I was hired and started the project and had over 600 customers/web sites by the end of the second month. As of April 1998, there are 7000 customers using the server. (As of 2002, I cannot estimate the size of the system. It is currently known as Road Runner Cable Service.) My understanding is that my server was taken offline and replaced sometime in 2005.

Georgia Institute of Technology (October 1996 - June 1997)

Title: Teaching Assistant

Location: Atlanta, GA 30332

Website: <https://www.gatech.edu/about>

Full-time: No

Roles:

- Teaching Assistant

Part-time teaching assistant while attending graduate school. Assisted with programming and computer theory classes.

Southeastern Louisiana Univ. (August 1995 - August 1996)

Title: Computer Science Instructor

Location: Hammond, LA 70402

Website: <https://southeastern.edu/>

Full-time: Yes

Roles:

- Computer Science Instructor

Fulltime computer science instructor at my undergraduate school after getting my master's degree. Wrote lesson plans and taught introductory classes of general computer & web skills.

Pearl River Community College (August 1994 - August 1996)

Title: Adjunct faculty

Location: POPLARVILLE, MS 39470

Website: <http://www.prcc.edu/>

Full-time: No

Roles:

- Adjunct faculty

Taught classes part-time at PRCC while I was pursuing my Master's degree at USM. Wrote lesson plans and taught introductory classes of general computer & web skills.

Univ. of Southern Mississippi (August 1993 - August 1995)

Title: Teaching Assistant

Location: Hattiesburg, MS 39406-0001

Website: <https://www.usm.edu/>

Full-time: No

Roles:

- Teaching Assistant

Part-time teaching assistant while attending graduate school at USM. Wrote lesson plans and taught introductory classes of general computer skills (Word Processing, Spreadsheet, dBase, web) and Pascal programming.

THAYER School of Engineering (August 1988 - July 1993)

Title: Software Engineer

Location: Metairie, LA 70125

Website: <https://engineering.dartmouth.edu/>

Customer: FRTIB

Full-time: Yes

Roles:

- Software Engineer
- System Administrator
- Database Administrator

Project NORTHSTAR was an initiative by Dartmouth College to introduce high powered workstations into the curriculum of its engineering school in the late 1980's. After initial success the project was expanded to be campus wide and include undergraduate classes. I was hired as the project was expanding to cover the whole campus. At the time there was a manager who was a part time software developer, a full time developer, and a full time system administrator. They needed a part time admin and part developer to handle the increased workload. Instead, they hired me full time and I spent 2 days a week as a system admin and 3 days a week as a software developer.

Over time, as a system administrator, I became the admin for the odd systems as well as designing and developing the SOPs for both hardware and software. I integrated new systems into the infrastructure as they were acquired. The systems included SunSolaris, IBM AIX, IBM RT, HP-UX, and Silicon Graphics IRIX. As software developer I maintained the largest piece application (GRAF) and designed and maintained many applications for use in the classroom or assignments outside of class. Many of my projects were interfaces with 3rd party systems elsewhere on campus. This job became the template for the rest of my career.

Because of this job and the experience I gained when I have been a system admin I have been the one that works on the weird problems, the one that require more design than the usual or ones that require some software development (scripting). As a software developer, this experience has allowed me a better understanding of how the machines I am working on work and helps me design in fault tolerance. I have found that I also have a better understanding of the priorities of the other side when development becomes a 'war' between the hardware and system design.

Designed, developed, documented and maintained application and utility/system software to support engineering and science curriculums in a heterogeneous UNIX workstation environment. Was responsible for specific administration duties and development of system management support programs and acted as primary system administrator of 100+ UNIX workstations for extended periods on numerous occasions. Managed the installation and use of real time data acquisition systems based on both WINDOWS and HP UNIX platforms. Managed Internet distribution of project software to external sites (1990-1993). Was responsible for portability and cross-platform compilation of 50 meg source distribution. Was responsible for help desk and managed help desk staff of 8-11 students.

Trafton Academy (September 1985 - May 1986)

Title: Computer Science Teacher

Location: Hammond, LA 70401

Website: <https://www.traftonacademy.org/>

Full-time: No

Roles:

- Computer Science Teacher

High School Teacher at Trafton Academy for the 1985-86 academic school year. Wrote lesson plans and taught basic programming skills to the tenth grade class while an undergraduate at SLU.

Southeastern Louisiana Univ. (January 1984 - May 1986)

Title: Various

Location: Hammond, LA 70402

Website: <https://southeastern.edu/>

Full-time: No

Roles:

- Operator

- Software Developer
- Salesman (DH Holmes)

Miscellaneous jobs while in college.

Operator in main computer room at SLU. Programmer for psychology department at SLU; several papers were presented based on the project. Salesman in local department store; won top sales award 7 out of 13 months employed.