

**David P. Ferrell**  
**Senior Software Engineer**

440-231-5425

[david@xcodeguy.com](mailto:david@xcodeguy.com)

In my *27 years of experience in the software field*, I've met a lot of developers, young and old. And the one thing that separated the truly great ones from the crowd is passion. I believe that my passion for software is the reason I've been so successful. Most of the time in my career, I have not been developing software for my own benefit. Whether it's code that creates a financial report or a video game, I try to remember that the quality and innovation of the work I do can directly affect the happiness of other people. Programming is my life's work. I'd never compromise on it and I'd always sacrifice a weekend for it. *When I am truly pioneering development I know can change the world.*

I have some of the languages, frameworks and technologies I've worked with in my resume, however, new tools are constantly being developed, so organizations constantly move on to new and better tools, and the tools of yesterday become obsolete.

I could go one step further and tell you that I'm using a tool that is up-and-coming. But things change. Several years ago, apps on phones did not exist. Today's tools will go away or at least be dethroned and more cutting edge tools will take their place. I've learned the fundamentals that were figured out decades ago and that have been true since. I've learned programming in concept and practice. I don't try to be a better iOS or .Net programmer - just a better programmer, period.

I learn the languages that the tools are built with, and the principles behind them, so that I can build my own tools. I use what is available because I don't want to reinvent the wheel, not because I can't write the tools themselves.

Learning a popular API or the next big thing will get me the job, but in order to be relevant in the long term, I've learned to program, not just how to use the tools. I study the underlying fundamentals of tools, so that I know what tools to use, or how to build them myself when I cannot find one that fits. I practice *programming*, not just individual tools or languages.

## COMPUTER SKILLS

| Programming and Scripting Languages   | Operating Systems   | Web Servers and Network Protocols   | Databases  |
|---|---|---|--|
| Objective-C<br>Swift<br>Visual C# .Net<br>Visual Basic .Net<br>Visual C++ .Net<br>Java<br>PHP<br>Ruby (Rails)<br>Java Script<br>VB Script<br>Embedded Visual Basic<br>Delphi<br>Power Builder<br>Visual Basic 6.0<br>COBOL<br>FORTRAN | OS X<br>Windows Desktop<br>Windows Server<br>Windows Mobile<br>Android<br>Linux<br>Unix   | Microsoft IIS<br>Apache<br>TCP/IP<br>DHCP<br>DNS<br>LDAP<br>Firewalls<br>DMZ's<br>Wireless 80211x | Microsoft SQL Server<br>IBM DB2<br>Oracle<br>MySQL<br>PostgreSQL<br>Sybase<br>PI Open<br>Gupta SQL Base<br>HIS/COMTI<br>Microsoft SharePoint |
| Development Frameworks  | Hardware  | Asymmetric Public Key Encryption and Cryptographic Hash Functions                                 | Push Notifications, Location Tracking and AdHoc Distribution   |
| iOS/tvOS SDK<br>Visual Studio .NET<br>Android SDK<br>Blackberry SDK<br>jQuery<br>Node.js<br>Angular<br>Zend<br>Kendo<br>Dojo<br>Moo Tools<br>REST/JSON  | Intel, AMD and SATA, AGP, PCI, IDE, SCSI<br>Routers<br>Switches<br>Intel Processors<br>Motorola Processors<br>Printers<br>Flatbed Scanners<br>Finger Print Scanners<br>Signature and Drawing Tablets<br>Magnetic Swipe Devices<br>Video Capture Interfaces<br>Point of Sale Terminals | DSA<br>ElGamal<br>Elliptic Curve<br>NTRUEncrypt<br>RSA<br>HMAC<br>MD5<br>SHA-1<br>SHA-2           | Geoloqi<br>Pushwoosh<br>GeoFencing<br>GeoTriggering<br>Testflight<br>AirOnApp  |

## EXPERIENCE

### Contract Mobile Application Developer – (Jan. 2014 to Present)

- Xcodeguy Software  
Creating family and collaborative based applications for the Apple TV, iPad and iPhone devices.
- BA4Y Mobile Solutions  
Job Search Power Meter is an iPhone and Android mobile application which helps people track and rate their job interviews and interview skills using pre-defined objectives and goal oriented tasks.
- SONY Computer Entertainment America  
PlayStation®App is an iPhone, iPad and Android application that lets users with a PlayStation account participate in on-line social collaboration events, chat and purchase games and add-ons for the PS4. I wrote the secure encryption portion of the login and most of the REST based back end content fetching.
- ChupaMobile LTD  
Triple Fire Slots Casino and the Dubstep Slots Game are template based mobile slot-machine games for the iPhone and iPad. They support in-app-purchasing of coins and were released to ChupaMobile under a Non Exclusive License agreement.



**Chief Development Officer - BA4Y Mobile Solutions, Akron OH (Jul. 2014 to Jul. 2015)**

- Foster a culture of philanthropy within the organization. Assure that the organization's technology culture, systems and procedures support fund development and vice versa. Leads staff and volunteers to institutionalize philanthropy and development of technologies within the organization.
- Plan, coordinate and assure implementation of strategies to develop products and contributions to support the organization. Assure development and maintenance of appropriate systems to fund software initiatives including but not limited to volunteer and donor management, research and cultivation of software products and technologies.
- Maintain accountability and compliance standards for ongoing and new products.

**Senior Mobile Developer – Realeflow LLC, Parma OH (Mar. 2011 to Jan. 2014)**

- Oversee and provide direction for all aspects of mobile development initiatives and projects.
- Provide technical knowledge and take lead development roles for new lines of business.
- Develop and implement a wide range of mobile applications.
- **AppGiraffe – Designed and coded a Mobile Application Factory built on CentOS and Windows 2012 servers implementing Continuous Integration, Databases and Web based front-end and back-office interfaces. AppGiraffe creates multiple platform mobile applications for all industries and niches such as Churches, Schools, Restaurants and Golf Courses. This system uses the Cordova Mobile Application Hybrid Framework with multiple custom coded plug-ins to implement hardware and software features not supported by the Cordova API.**
- Herds – A private social network multiple platform mobile application using a “group” metaphor. Herds enable groups to share all types of digital media, location check-ins, etc.
- Hammerpoint - Designed and coded a multiple platform mobile application that guides the user through a workflow and automates much of the process of performing a property estimate.
- TopCrop – Designed and coded a multiple platform mobile application that queries the Yahoo Financial API and presents the user with a fun and interactive interface of current Futures (Commodities) stocks.
- Realeflow Mobile – Designed and coded a multiple platform mobile application that queries the Realeflow back-office and allows an authenticated user to perform functionality that compliments and enhances the existing Realeflow Investor web application.

**Contract Mobile Application Developer – American Greetings Interactive, Brooklyn OH (Jan. 2011 to Mar. 2011)**

- Sr. developer responsible for the Create-A-Card HD product. My primary responsibility was to identify critical design issues with the existing iOS application and fix them.
- Wrote several Ruby RESTful API's to feed content to the Create-A-Card product.
- Implemented and coded new features into the application which were provided by design and storyboard teams.
- Mentored various members of the mobile development team and assisted them in their efforts to get products ready for launch on both Android and iOS platforms.

**Contract Application Developer - Akron University Innovation Campus, Akron OH (Apr. 2010 to Jan. 2011)**

- Developing specialized financial marketing and banking applications using Zend/PHP, Dojo, Apache, PostgreSQL and other open source tools.
- Provide college interns with mentoring.

**Mobile Applications Developer - CollegeFitness.com LLC, Mayfield Village OH (Mar. 2009 to Jan. 2010)**

**CF Mobile** - iOS, Android, Blackberry

- Designed and coded a mobile device application that synchronizes a registered CollegeFitness.com website users workouts. These workouts can be automatically generated by the website or the user can create and customize their own workouts, routines and exercises.
- High-resolution instructional videos of professional fitness trainers are also downloaded, streamed and packaged in the application. A user can also create and upload personal exercise videos to the website which will also be synchronized to the device.
- While performing a workout, the user can record statistical information about their performance of any given exercise on the device. Once a statistic has been recorded, the application will synchronize this data back up to the CollegeFitness.com website at the user's convenience.
- Ad-hoc distribution profiles were created for beta testing the application, which allows a tester to install the application on their device without the process of individual builds or the iTunes Application Store.
- The Xcode Instruments were used extensively for determining memory leaks and object allocations which made the application extremely stable and more optimized to run in the small amount of device memory space.
- The Apple Human Interface Guideline (HIG) was followed extensively. As a result, Apple approved the application on its first submission without issue.

**CF Nutrition** - iOS, Android, Blackberry

- Designed and coded a mobile device application that tracks calories, eating habits and comprehensive nutrient intake for statistical analysis. Data from the application is synchronized to and from the CollegeFitness.com website.
- Uses iPhone SDK MapKit framework. Part of the application functionality is to allow the user to select a food group, food and then restaurant. The application will then provide a map with annotations indicating all restaurants and sources of that food item in their area.
- Uses data from USDA with over 7000 restaurants, foods and accompanying nutritional values.

**CollegeFitness.com** - PHP, MySQL, JQuery, JSON, Yahoo YUI, WordPress MU/SSO, XMLRPC

- Designed and coded Restaurants Locator, which features integration with Google Maps.
- Designed and coded Nutrition Application, My Calories/Log.
- Wrote a WordPress MU interface that leverages the existing user and domain objects to create WP accounts, Blogs, SSO, etc.

**Sr. Technical Analyst - Parker Hannifin Corp., Mayfield Hts. OH (Aug. 2005 to Jan. 2009)**

**International Manufacturing B2B website** - ASP, ASPX .NET, VB6, VB .NET, COM+, COBOL, DB2, HIS (2000 & 2004)/COMTI, VSAM, MS SQL Server 2000, EDI, JCL, MS BizTalk Server

- 2008 – Designed and coded a caching algorithm which targets key areas of the website to reduce round-trip calls to the mainframe. A six figure cost reduction to the mainframe was achieved.

- 2008 – Implemented Ajax in key areas of B2B portal to reduce round trips to IBM mainframe. This was the first-step approach to a significant cost reduction in tandem with the above caching algorithm. This became a best-practice approach for future site development.
- 2008 – Rewrote Order Entry system to further enhance performance and reduce overall cost to the customer and enterprise resources.
- 2007 – Designed Distributor Locator application for new Parker.com global website. Geo Coding, Apache, PHP, MySQL and .Net make up the architecture.
- 2007 – Designed and coded website localization project for Korean customers, distributors and divisions. Existing VB6 and older technology as well as .Net applications of website needed to adapt to a new Unicode presentation and back-end model. Continue to provide double-byte (Unicode) languages for Parker's other international markets.
- 2007 – Migrated enterprise and worldwide SharePoint users to Active Directory.
- 2007 – Implemented SharePoint portals specific to Parker divisions using Community Kit, MySite and Role Based Templates.
- 2007 – Integrated RSS feeds for various divisions aka Content Syndication.
- 2006 - Migration to IBM Blade Servers, Windows Server 2003 and HIS2004 allowed many new technology issues to surface. *Worked very closely with the Microsoft HIS development team installing and testing the latest .Net OleDb DB2 drivers.*

**Administer Web and HIS server clusters** – Perform all server related responsibilities, diagnostics and troubleshooting. Provide server related tasks to other team members.

**C# .Net 2.0/3.0 and Classic ASP development** – *Phconnect.com, the Parker Master Catalog System and Parker.com are enterprise wide systems and portals that are continually updated and enhanced with direction from the ecommerce steering committee. Many of the enterprise projects target the older technologies (ASP/VB6) of these systems as well as the newer .Net 2.0/3.0 applications.*

**Contract .NET Developer - Exodus Integrity Services, Inc. Willoughby OH (Aug. 2004 to Aug. 2005)**

**International Manufacturing B2B website** - ASP, ASPX .NET, VB6, VB .NET, COM+, COBOL, DB2, HIS (2000 & 2004)/COMTI, VSAM, MS SQL Server 2000, EDI, JCL, MS BizTalk Server

- Enhance and maintain front-end browser based web application by modifying and creating active server pages that call COM and COMTI brokers which perform transactional based processing against DB2 and VSAM databases residing on IBM mainframe. I coordinate and develop with other team members to establish delivery of various backend processes to support proper integration with the front-end web application. A strong emphasis on XML serialization is used for marshaling data streams between all application layers.

**Sr. Application Developer - National Employee Benefit Services, Cleveland OH (Apr. 2004 – Jun. 2004)**

**Nebsonline.com** - ASP, Java Script, Microsoft SQL Server 7.0

- This website provides 403b benefit enrollment, management and administration services to public school districts across the United States along with Mutual Fund analysis and portfolio building.

I was responsible for trouble shooting and fixing any problems with the site including any server issues such as operating system updates and hardware problems. I also coded changes in functionality and content.

**Common Remittance System** – Visual Basic 6.0, Microsoft SQL Sever 7.0

- This system is used in-house. It handles the payroll cycles of all participating school district's employee contributions. It provides data feeds to the accounting and financial operation systems. It handles the electronic funds transfer to several banks and Mutual Funds brokerages.

I was also responsible for daily trouble-shooting. I coded fixes and implemented functionality changes as needed in a live production environment. I also provided desktop support, ad-hoc reporting and phone support to outside clients.

### **Sr. Software Engineer – Time Keeping Systems, Solon OH (Sept. 2003 – January 2004)**

#### **Time Keeper - C# .Net**

- A windows Desktop application that interfaced with portable time clocking/checkpoint hardware, which produced various reports for checkpoint verification and timestamp reporting.

#### **Contact Link - C# .Net**

- A business card scanning and contact management software. The application is designed as an off-the-shelf product that supports as input MS Word, XML, HTML, PDF, Scanned Images and A8 Cards. It supports localization when importing and exporting the contact information. The recognition engine is based on an adaptive algorithm of Natural Language Processing.

*These systems were originally written in Visual Basic 6 with international language (localization) support. The backend database is Microsoft Access 2000. Other technologies include complex DLL's written in Visual Basic 6.0 that provided the core functionality of the Contact Link software product.*

I was one of two programmers responsible for writing the conversion from Visual Basic 6.0 to C# .Net to keep the desktop applications within the current technologies. Other conversions on these products were from Access 2000 to Microsoft SQL Server 2000.

### **Sr. Web Developer - AON Service Corp. /Cambridge, Solon OH, (Apr. 2000 – Sept. 2003)**

AON is a worldwide company that has diversified into many businesses related to the insurance industry. Cambridge is a division of AON that deals with automobile claims adjustment and subrogation.

#### **StaplesEmployeeBenefitServices.com**

- This website provides information and enrollment for small business coverage and benefits plans with affiliates through the Staples office supply corporation. It also incorporates a complete back office reporting system.

*The website was developed using Visual Interdev with Active Server Pages written in Visual Basic Script with client-side Java Script. The backend database uses Microsoft SQL Server 2000 and stored procedures. Other Technologies used are ActiveX Components (COM) written in Visual Basic 6 running in Microsoft Transaction Server (MTS) and IIS 5.0 running on Microsoft Windows 2000 Server.*

I was responsible for designing, coding and implementing the entire system. I coded all of the web pages, COM objects and SQL stored procedures as well as creating and designing the database. I also provided help desk and technical support. Other responsibilities included the administration of the two Microsoft Windows 2000 servers that this site ran on. I performed performance tuning, operating system updates and daily local and remote monitoring of the servers.

### 24x7Claims.com

- This website is an insurance portal currently being used by Lexus, Toyota and Enterprise Rent-A-Car.

*The website was developed using Visual Interdev with Active Server Pages written in Visual Basic Script with client-side Java Script. The backend database uses Microsoft SQL Server 2000 and stored procedures. Other Technologies used are ActiveX Components (COM) written in Visual Basic 6 running in Microsoft Transaction Server (MTS) and IIS 5.0 running on Microsoft Windows 2000 Server.*

I was responsible for designing, coding and implementing the entire system. I coded all of the web pages, COM objects and SQL stored procedures as well as creating and designing the database. I also provided help desk and technical support. Other responsibilities included the administration of the two Microsoft Windows 2000 servers that this site ran on. I performed performance tuning, operating system updates and daily local and remote monitoring of the servers.

### ClaimImage.com

- This website provides a cost effective document/imaging solution resulting in decreased monthly Fed-Ex expense and a significant increase in data entry operator productivity and procedure turn-around.

*The website was developed using Visual Interdev with Active Server Pages written in Visual Basic Script with client-side Java Script. The backend database uses Microsoft SQL Server 2000 and stored procedures. Other Technologies used are ActiveX Components (COM) written in Visual Basic 6 running in Microsoft Transaction Server (MTS) and IIS 5.0 running on Microsoft Windows 2000 Server.*

***\*With permission from my supervisor, I took the initiative to re-write this website using C# under the new .NET technologies for a hands-on approach to the benefits of using the new language and features of .NET. Also, I implemented XML SQL SELECTS using XSLT pages to present the database information to the end-user.***

I was responsible for designing, coding and implementing the entire system. I coded all of the web pages, COM objects and SQL stored procedures as well as creating and designing the database. I also provided help desk and technical support. Other responsibilities included the administration of the two Microsoft Windows 2000 servers that this site ran on. I performed performance tuning, operating system updates and daily local and remote monitoring of the servers. Because I rewrote this site using .NET and C#, I had to make sure that both servers had the .NET framework and correct SQL server XML updates applied.

### AssignNet.com

- This website picks the “best person” for the job based on qualifications, location and schedule. . It also incorporates a complete back office reporting system with administration and site/user security features.

*The website was developed using Visual Interdev with Active Server Pages written in Visual Basic Script with client-side Java Script. The backend database uses Microsoft SQL Server 2000 and stored procedures. Other Technologies used are ActiveX Components (COM) written in Visual Basic 6 running in Microsoft Transaction Server (MTS) and IIS 5.0 running on Microsoft Windows 2000 Server.*

I was responsible for designing, coding and implementing the entire system. I coded all of the web pages, COM objects and SQL stored procedures as well as creating and designing the database. I also provided help desk and technical support. Other responsibilities included the administration of the two Microsoft

Windows 2000 servers that this site ran on. I performed performance tuning, operating system updates and daily local and remote monitoring of the servers.

### **Corporate Intranet**

- This is a LAN based website that provides business tools such as client specific claims procedures, legal documentation, HR materials, time card reporting, stocks, weather, etc. The site incorporates a back office interface for various reports and system utilities. It also implements LDAP/ADSI.

*The website was developed using Visual Interdev with Active Server Pages written in Visual Basic Script with client-side Java Script. The backend database uses Microsoft SQL Server 2000 and stored procedures. Other Technologies used are ActiveX Components (COM) written in Visual Basic 6 running in Microsoft Transaction Server (MTS) and IIS 5.0 running on Microsoft Windows 2000 Server.*

I was responsible for designing, coding and implementing the entire system. I coded all of the web pages, COM objects and SQL stored procedures as well as creating and designing the database. I also provided help desk and technical support. Other responsibilities included the administration of the two Microsoft Windows 2000 servers that this site ran on. I performed performance tuning, operating system updates and daily local and remote monitoring of the servers.

### **Time Card System**

- An intranet application for polling and capturing employee work hours. The purpose is for feeding the main AON corporate payroll system along with other reporting particulars.

*The website was developed using Visual Interdev with Active Server Pages written in Visual Basic Script with client-side Java Script. The backend database uses Microsoft SQL Server 2000 and stored procedures. Other Technologies used are ActiveX Components (COM) written in Visual Basic 6 running in Microsoft Transaction Server (MTS) and IIS 5.0 running on Microsoft Windows 2000 Server.*

I was responsible for designing, coding and implementing the entire system. I coded all of the web pages, COM objects and SQL stored procedures as well as creating and designing the database. I also provided help desk and technical support. Other responsibilities included the administration of the two Microsoft Windows 2000 servers that this site ran on. I performed performance tuning, operating system updates and daily local and remote monitoring of the servers.

### **Invoice Rollup**

- This is a LAN based website application that breaks down and rolls up vendor specific charges that were used for claim processing and adjustment.

*The website was developed using .NET Active Server Pages written in C# with some implementation of web controls. The backend database uses Microsoft SQL Server 2000 and stored procedures. Other Technologies used IIS 5.0 running on Microsoft Windows 2000 Server with the .NET framework installed.*

I was one of two developers responsible for designing, coding and implementing the entire system. I worked closely with the other programmer to code all of the web pages, and SQL stored procedures. We also provided help desk and technical support in which we both took turns or as we were available. My other responsibilities included the administration of the two Microsoft Windows 2000 servers that this site ran on. I performed performance tuning, operating system updates and daily local and remote monitoring of the servers.

### **Code Builder**

- This is a stand-alone application that writes Active Server Pages and Modules containing database connection and manipulation code. It presents the user with a Graphical User Interface. It searches the network for all available Microsoft SQL Servers and allows the user to select databases and tables. Based on the appropriate authentication, the application will generate the following to a text file or the clipboard for pasting into an application:
  1. Visual InterDev style Visual Basic Script with all ADO connections, definitions and parameter objects.
  2. Visual Basic 6.0 ADO connections, definitions and parameter objects.
  3. Standard SELECT, INSERT and DELETE SQL statements.
  4. Stored Procedure @declare statements.
  5. Visual Studio .NET style Visual Basic Script.
  6. Visual Studio .NET style C# Script.
  7. Simple vData() array to column mapping.
  8. Simple column to element numbering schemas.

*The application was written in C# and compiled as a stand alone executable with an MSI installer.*

I was responsible for coding and supporting the entire application. This was a developer utility designed to help the other programmers in the IT department. I personally liked it because I could focus more on the purpose of what I was developing rather than the time involved “mapping” the database table columns to the ADO code.

While mentoring the other programmers in the department I always recommended that they hand code the ADO connection and parameter objects to get over the learning curve but would show them this application to speed up their development.

### **Sr. Programmer Analyst IV - Progressive Insurance DBG, Highland Hts. OH, (Jan. 1999 to Apr. 2000)**

Progressive Insurance is one of the nations leading providers of automobile coverage insurance. The Diversified Business Group deals with specialty services such as claims adjustment and subrogation.

#### **DriveltToday.com**

- This website is a business to consumer (B2C) application that sells inspections and warranties on used vehicles via on-line credit card processing. The site supports affiliate programs and deep linking. Some affiliates include *AutoTrader*, *LinkShare* and *AutoGiant*.

*The website was developed using Visual Interdev with Active Server Pages written in Visual Basic Script with client-side Java Script. The backend database uses Microsoft SQL Server 2000 and stored procedures. Other Technologies used are ActiveX Components (COM) written in Visual Basic 6 running in Microsoft Transaction Server (MTS) and IIS 5.0 running on Microsoft Windows 2000 Server.*

I was responsible for designing, coding and implementing the entire system. I coded all of the web pages, COM objects and SQL stored procedures as well as creating and designing the database. I also provided help desk and technical support. Other responsibilities included the administration of the two Microsoft Windows 2000 servers that this site ran on. I performed performance tuning, operating system updates and daily local and remote monitoring of the servers. At one point, three other developers were hired to assist me in other website development in which I was responsible for bringing them up to speed with DriveltToday.com and mentoring them in the other projects.

### **ReadyForSale.com**

- This website is a business to consumer (B2C) application created for National City Bank that allows independent car dealerships to select and purchase off-lease vehicles. Dealers can login for inspection reports, photographs and prices of vehicles. Purchase is done through and End-of-Term counselor.

*The website was developed using Visual Interdev with Active Server Pages written in Visual Basic Script with client-side Java Script. The backend database uses Microsoft SQL Server 2000 and stored procedures. Other Technologies used are ActiveX Components (COM) written in Visual Basic 6 running in Microsoft Transaction Server (MTS) and IIS 4.0 running on Microsoft Windows NT Server.*

I was one of two developers responsible for designing, coding and implementing the entire system. I worked closely with the other programmer to code all of the web pages, and SQL stored procedures. We also provided help desk and technical support in which we both took turns or as we were available. Other responsibilities included the administration of the Microsoft Windows NT server that this site ran on. I performed performance tuning, operating system updates and daily local and remote monitoring of the server.

### **Division Corporate Intranet**

- This is a LAN based website that provides business tools such as client specific claims procedures, legal documentation and HR materials.

*The website was developed using Visual Interdev with Active Server Pages written in Visual Basic Script with client-side Java Script. The backend database uses Microsoft SQL Server 2000 and stored procedures. Other Technologies used are ActiveX Components (COM) written in Visual Basic 6 running in Microsoft Transaction Server (MTS) and IIS 4.0 running on Microsoft Windows NT Server.*

I took ownership of this website shortly after it had been written by another programmer in the department. I was responsible for trouble shooting and fixing any problems with the site as well as coding any changes in functionality and content.

### **Mainframe Data Conversions**

- I was responsible for several data conversions in which I had to make requests of the Mainframe Operators in Progressive's main data center to load tapes and dump files, which I would in turn, import Worker Compensation information into Sybase SQL Anywhere. These projects were considered as "paying my dues" when I first started at Progressive because they weren't the most popular tasks favored by the other programmers in the IT department.

### **Sr. Programmer Analyst - Sears Family Dental Centers, Pepper Pike OH, (Jul. 1997 to Jan. 1999)**

Sears Family Dental consists of 56 stores that provide dental and orthodontic services. I worked in the corporate headquarters.

### **Dental Corporate Office System**

- Developed conversion, scheduling and reporting programs. The overall system uses a retail model to poll and stage net/daily changes via modems from 56 dental centers on a nightly basis using replication. It is being used to determine marketing and financial information along with producing feeds to other accounting systems.

*The programs are written in Visual Basic 5.0 and C++ 5.0. The backend database uses Microsoft SQL 6.5, Microsoft Access 97, Sybase SQL Anywhere and SQL base (Gupta). Other technologies used are Active X controls (OCX) written in C++.*

I was responsible for working with an Atlanta Georgia based consulting company. My task was to write all of the utilities that would extract data from each remote dental center location and convert it into a format that could be imported into Microsoft SQL Server 6.5. After the Dental Corporate Office System was delivered and in production, I took ownership of all source code and provided help desk support to all remote dental centers and the corporate office as well as coding any changes in functionality. I was the only programmer for this company.

### **Other accomplishments**

- I wrote various ad-hoc query tools and feed applications for users and other accounting systems as well as a centralized statement generation program.

*The programs are written in Visual Basic 5.0. The backend databases use Microsoft SQL 6.5.*

### **Sr. Programmer Analyst - Zerc Systems International, Brookfield OH, (Nov. 1996 to Jun. 1997)**

#### **Biometric Applications Development**

##### **Windows NT Device Drivers**

- Windows NT system files that operate an Optical Memory Card reader/writer drive, TouchSafe II fingerprint scanner and Wacomm Signature tablet.

*The device drivers are written in C++ using the NT Device Driver Development Kit. Some in-line assembly language is implemented for direct device manipulation and for marshaling proprietary data types that could not be handled directly with C++. For the Optical Memory Card drive, a proprietary file system was developed based on but varying largely from a FAT32 model.*

I was one of two developers responsible for coding and debugging the device drivers. I worked closely with one other programmer sharing and splitting the tasks at hand to complete this phase of the system.

##### **OCX Controls**

- Graphical design time controls that are dragged from the Visual Basic 4.0 toolbox and placed on a windows form for developing Graphical User Interfaces (GUI) that incorporate biometric devices. These controls are part of the proprietary Developers Toolkit.

*The OCX controls are written in C++ and provide a visual interface between the actual biometric devices and the Visual Basic user interface.*

I was one of two developers responsible for coding and debugging the OCX controls. I worked closely with the other programmer sharing and splitting the tasks at hand to complete this phase of the system.

##### **Neural Network**

- This is a node based learning network for the purpose of searching an AFIS based fingerprint template.

*The network was written in C++ and Assembler and used a proprietary TCP/IP based protocol to communicate and load balance between two Windows NT 4.0 Servers.*

I was responsible for coding a low level search algorithm based on examples that I researched on the internet and also coded a C++ OCX to handle the low level API calls to the neural network DLL's. The OCX was used in the main Visual Basic 4.0 interfaces.

### **Enrollment Station**

- This is an application that is used to enroll a subject into the system. It handles the capturing of all biometric information and also historical data such as date of birth, name, and address and social security number. It visually presents the fingerprint image, signature and video stream and also produces and prints the captured information on the Optical Memory Card.

*The Enrollment Station is written in Visual Basic 4.0. It uses the OCX controls from the proprietary Development Kit to simplify the creation of biometric software.*

I was responsible for coding and debugging the entire application. I also operated and presented the application to prospective investors of the company.

Participated in the design and development of an OMC drive and Point of Sale (POS) terminal.

*Other responsibilities were to assist the hardware engineer. I researched specific parts for availability, built and assembled various circuits and fabricated several enclosures.*

### **Application Developer - Forrest City Enterprises, Brookpark, OH (Dec. 1995 to Nov. 1996)**

- Developed three financial accounting systems specifically for real estate management.
- Assisted in the migration of certain mainframe systems to windows client server systems.

*All applications are written in Visual Basic 3.0, Microsoft Visual C++, Microsoft Access 2.0, Sybase, Power Builder and SQL. All client applications run on Windows 3.11. The database servers are HP/UNIX based.*

### **Project Leader - Commercial Traffic, Parma, OH (May. 1993 to Dec. 1995)**

#### **Application Development**

- PICK BASIC and PI/Open development for existing freight processing and logistics systems.
- Developed companies first windows based client server freight processing software for third party carrier companies.
- Redesigned existing freight reporting system to further meet clients' specifications and functionality.

*All applications were written in VB3 and MS Access. An AIX/UNIX RISC computer running PI/Open and PICK BASIC served as the backend platform.*

### **Consultant - Pro Resource, Shaker Heights, OH (Nov. 1992 to Apr. 1993)**

#### **Application Development**

- Services contracted by Pro Resource ranging from x Base programming to simple report implementations for Sherwin Williams.

**Programmer - Banks Baldwin Legal Publishing Co., Cleveland, OH (Oct. 1991 to Oct. 1992)**

**Application Development**

- Worked in the accounts receivable department programming and modifying an existing PI Open accounting system while generating custom reports written in PICK BASIC.
- Developed in-house time reporting system written in Clipper.

**EDUCATION**

- Bachelor's Degree in BSIT/Mobile Systems Development, Sep. 2018, Capella University.
- Associate Degree in Computer Science, Oct. 1990, Hocking Technical College, Athens, OH.

References available upon request.