
Darryl Dion Hawkins

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Summary of Qualifications

Software Engineer with over 20 years experience specializing in object-oriented design and development. Possesses knowledge of the full lifecycle of the software design process including requirements definition, prototyping, proof of concept, design, testing, and maintenance.

Skills and Experience

Programming Languages: C#, Java, C++, C, Visual Basic, JavaScript, PERL, PASCAL, and Prolog

Assembly Languages: Intel x86, PowerPC, MIPS, Hitachi SH2/SH3, Motorola 68K, and IMS 3230/3240

Web Development: ASP.Net, JSP (Java Server Pages), Applets, Servlets, HTML/XHTML, CSS, and HTTP

Technologies: Windows .Net, XNA, J2EE, J2ME, MIDP, Swing, XML, SQL, and TCP/IP

Software Tools: Visual Studio 2003/2005/2008, Eclipse, Borland JBuilder, MS SQL Server, Adobe Photoshop, Lightwave, Truespace, Rational Rose, and Clear Case

Operating Systems: Windows (Vista, XP, NT, 98, 95, & 3.1), Windows Mobile/CE, Macintosh, Linux, and MS-DOS

Hardware Platforms: Microsoft Xbox 360, Sony Playstation, Sega Saturn, Sega Genesis/32x, the Super Nintendo Entertainment System, Nintendo Gameboy, Palm, and Microsoft PocketPC

Employment History

Printronic Inc, Irvine, California

Senior Software Engineer

2001-2008

- BizTalk RFID Provider: Developed the software provider that allowed Printronix printers to operate within the Microsoft BizTalk RFID platform. The provider was implemented using C# and the Microsoft Device Service Provider Interface. This project also required identifying and designing necessary changes in the printer firmware.
- Printer Management Libraries: Designed and developed the .Net software libraries used for managing Printronix devices. Implemented in C#, these libraries allowed third party system integrators to incorporate remote management of printers into their applications.
- PNE Next Generation: Designed and developed an enterprise application for the management of Printronix printers. Implemented using J2EE technologies, this multi-tiered application included a device management server, a device management client application, and a JSP web client application. Microsoft SQL Server was the back-end database.

Rational Software, Irvine, California

Senior Software Engineer

2000-2001

- ProjectConsole Administrator & Designer: Developed Java Swing based applets for administration and new database schema design for the ProjectConsole application.
- ProjectConsole Maintenance Tool: Developed a Java Swing based application for managing the ProjectConsole application; which included creating databases, configuring server side components, and managing web deployment.

- Dashboard Servlets: Created servlets supplying the web services required by the various client-side components of the ProjectConsole application. XML and HTTP technologies were used extensively for this project.
- Lead the internationalization and localization project for a variety of Rational developed applications.

XNova, Foothill Ranch, California

Senior Developer

1997-2000

- Developed a Java based prototype of an existing C/C++ based school management application. This prototype demonstrated the feasibility of creating a Java implementation that would use a JDBC backend, EJB for the business logic, and JFC/Swing for the user interface.
- Developed an application for managing rebate and sales incentive data using Visual Basic 6 and Microsoft SQL Server.
- Designed and developed a web-based application that allowed parents to monitor a child's scholastic progress from any web browser. Technologies included C++, HTML, ASP, and COM.
- Conceived, prototyped, and developed a Windows CE based application for teachers that would allow for mobile entry of attendance, grades, etc. Resulted in XNova's first original product.
- Designed an enterprise financial application tailored specifically for the K-12 school system.

Interplay Productions, Irvine, California

Project Leader

1993-1997

- Designed and developed the virtual reality library which was the base technology of the products in the VR Sports division of Interplay. The cross platform library was hosted on the Sony Playstation, Sega Saturn, Windows 95/Direct3D, and Macintosh platforms. The library supported real-time 3D graphics, motion captured animation, and real-world physics simulation. Products included VR Baseball '97 and '98, VR Football, and VR Hockey.
- Star Trek: Starfleet Academy: Developed a 3D space flight/combat simulator for the Super Nintendo Entertainment System (SNES) and Sega 32x platforms. Written entirely in assembly language, this game had the distinction of being the first and only 3D game for the SNES not requiring add-on hardware. Responsible for designing and developing the 3D library, simulation library, artificial intelligence, game logic and interface, and 3D models. Also responsible for game design and story development.

Consulting

Carter Automation

2003

- Consulted to help bring online an application for monitoring and collecting data for a power plant. This application was developed using Visual Basic and an Access database.
- Developed the corporate website, www.carterautomation.com, for Carter Automation.

Cypress Church of Christ

2001

- The Bible is Right Website: Developed the website, www.bibleisright.com, for the Cypress Church of Christ.

International Meta Systems

1991

- Authored the assembly language programming manual for the IMS 3230/3240 imbedded RISC microprocessor.

City Channel 10

1988

- Produced the animated three-dimensional title sequence for the City Channel 10 cable station.

Hobbyist Projects

- OmniHawk.com** **2008**
- Created an ASP.Net website, www.omnihawk.com, displaying personal experience, resume, and examples of hobbyist projects.
- Microsoft XNA Dream Build Play Contest Entry: “Air Supremacy”** **2007**
- Designed and developed a video game for Microsoft’s 2007 XNA Dream-Build-Play contest. Using C# and XNA, this application required real-time programming, 3D modeling, graphics and sound programming, and utilized a variety of technologies and APIs.
- OmniBible 2.0** **2006**
- Developed a web based bible application using ASP.Net. This web service delivered the requested bible verses in formatted HTML.

Patents

- Controlled firewall penetration for management of discrete devices** **2005**
- Invented, designed, and developed the concept that led to Printronix receiving the European Patent #05253520. A method of remotely controlling a client device behind a firewall from an application outside of that firewall.

Publications

- MicroCity, Ahoy! Magazine*** **December 1986**
- Authored a description of video game programming accompanied by an example game called Micro City.

Education

- University of California, Irvine (UCI)** **1987-1988**
- California Institute of Technology (Caltech)** **1986-1987**