

**Robert Cooke**  
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## **Qualifications Summary**

Skilled and experienced software engineer. Applies object-oriented methodologies to analysis and design; focuses on reusable software components. Sustains a deep understanding of the latest technology, its implication and benefits and how it can be applied to solve business problems. Possesses excellent writing and communications skills. Extensive and current experience in writing Windows- and Internet-based software utilizing Delphi, C++, Java, HTML, XML and XSL among other technologies.

## **Employment**

*1/2002 – present, Self-Employed Software Engineer*

Continue service for clients using skills and experience gained in last 13 years. New tasks include training developers in Delphi and object-oriented techniques.

*11/1995 – 1/2002, Technical Architect/Principal Engineer, Forge Technology Partners, LLC/Acadia Software, Inc. Andover, MA*

Responsible for project management functions such as leading small teams of developers, estimation, task assignment and progress assessment.

Responsible for analysis, design and development of internal business software, shrink-wrap products and Internet/Web-based applications. Also responsible for developing user interface and coding standards for the company and graphical design work within the context of projects and for the company (e.g., letterhead, business cards, etc.).

## **Projects Summary:**

Video download and playback software. Fulfilled role of chief architect and technical manager for team of four, with some development responsibilities. This is a complex program that integrates a Web-based subscription service with robust, multi-session “smart” downloads to a local cache; responsive throttling of network bandwidth and CPU usage; low-level media player (Windows, Real, QuickTime, Flash) integration; encryption of both media files and network communications. XML was used extensively for communication between the client and application server.

Suite of tools used for capture, production and distribution of professional conference presentations. Fulfilled role as chief architect and primary developer, either solely or with one to two other developers. Data included synchronized still images, sound and video.

Leisure travel reservation management software. Fulfilled role as chief architect and primary developer in a team of three to four. Used Delphi and MS SQL Server to develop this multi-tier, object-oriented application. In order to support the users in their rather hectic work day, this application utilized several interesting user interface innovations.

Labor management software package. Fulfilled role as primary development and advised on architectural decisions. Implemented analysis and predictive tools for forecasting, labor needs calculation and scheduling. Implemented as a client-server application in Delphi.

Web-based query tool for document management system. Fulfilled role of architect and developer for the client portions of the application. Documents are displayed in a custom, client-side helper application that allows for more sophisticated control of document presentation than is available in a browser. Technologies involved are Delphi, Java, JavaScript, XML, JSP, HTML, Oracle and MS SQL Server.

Web-based inquiry tool for aircraft maintenance operations. Built on IIS, Active Server Page and Oracle technologies using JavaScript, VBScript and Visual Basic.

*1991-11/1995, Systems Programmer, ABB Combustion Engineering Service, Inc. Windsor, CT*

Developed engineering applications used in boiler design and maintenance. Primary development tool is Borland C++. Also wrote business applications for internal use, including several utilities using the Lotus Notes and Netware APIs.

Projects Summary:

Designed and built GUI front end for a boiler simulation application. The application collected data from an engineer in an intelligent fashion and constructed complex and cryptic input files for the simulation functions that resided on a RS6000 system.

Built several utilities for moving data between Lotus Notes databases and mainframe, AS/400 systems. Coding in C using Notes API on OS/2 and Windows.

*1990-1991, Software developer, self-employed, Middletown, CT*

Primary client was Stanley Tools, Hand Tool Division, with majority of development using Borland C++. Projects included software that controlled and monitored automated testing equipment in the Quality Assurance Laboratory and an ISO 9000 compliance tool used for documenting design and testing standards.

Projects Summary:

Designed and wrote standards document management system in support of ISO 9000 effort. This is a DOS-based written using Borland Turbo C++ and TurboVision libraries

Designed and implemented electronics and software for control of automated saw blade testing machine. This application controlled a complex machine with real-time reporting of test results. This machine reduced the testing time required for a single saw blade by at least an order of magnitude. This application, although still DOS-based, had a graphical user interface written in C++.

Designed and implemented electronics and software for control of automated hammer over-strike testing machine.

Designed and implemented software for control of tape measure hook-impact testing machine. This software required a custom serial interface for communication with the third-party-built machine. The software that controlled the device used a graphical user interface to display Stanley advertising while the interrupt-driven serial communications portion recorded and displayed the collected data.

Designed and implemented software for 16-channel, real-time strip chart, data acquisition device. This program was written in a FORTH-based language called ASYST that is specifically tailored for writing data-acquisition and control software.