

David W. Gray

Objective

To improve the way that I learn both physical and mental skills so that I can be more effective in whatever it is that I decide to do next.

Skills

- Management
 - Managed teams from two to ten people
 - Senior member of feature team in many Microsoft product cycles
 - Experience with SCRUM and other agile methodologies
 - Experience with feature crews and traditional waterfall methodologies
 - Experience with managing projects where different levels of management require different methodologies
- Technical
 - 10+ years of C/C++ programming experience
 - 10+ years of C# programming experience
 - Most experienced in thick client applications, especially diagnostics tools
 - Some experience in three tier applications including DRM content servers
 - Silverlight/WP7 programming experience

Work experience

2012-Present **Microsoft Corporation** **Redmond, WA**
Sabbatical

- Learning Spanish
- Learning to play the piano (and diving into music theory)
- Doing some writing
- Doing some coding
- Learning to tap dance
- Working on physical fitness practices
- Generally working on improving how I learn

2006 – 2012 **Microsoft Corporation** **Redmond, WA**
Principal Lead Software Design Engineer

- Led the Visual Studio Debugger team for the VS2012/Win8 product cycle. Windows 8 represented a major challenge for the debugger team on a number of levels – this was the first time in well over a decade that a new processor architecture has been introduced, the concept of the windows runtime had a substantial impact on all three of the engines the team owns (Native/Managed/JavaScript), and security lockdown at all levels of the technology stack presented a continuous flow of new problems (debuggers are very hard to distinguish from malware). I lead the team through these and other challenges and produced a faster and more stable debugger in the process.
- On the management front during the V2012 timeframe I had the interesting experience of working on a (enforced from the above) scrum team that was embedded in a division that practiced waterfall style project management on a project that did not appear to be particularly adapted to scrum. It certainly made an interesting introduction to that methodology.
- Led the IntelliTrace™ team in the v1 of a new debugger feature in VS2010 that adds in a historical aspect to the debugging experience. As part of the IntelliTrace™, we built the ability for the tester to seamlessly collect logs during testing and attach them to bug reports. The developer could then open the log from the bug and open it within the visual studio debugger.
- IntelliTrace™ is the first new feature of its magnitude to be added to the VS debugger ever. The co-ordination to build it and ship it both in Visual studio and the Team Test product was extraordinary. This was a giant step towards enhancing the edit-compile-debug experience of every developer that uses the product, and it is even

more important as a move towards making software more diagnosable outside of the developer's desktop.

- Led the VSTS Profiler team during the first part of the VS2008 product cycle. During this time the team reworked the analysis engine to allow for improvements to the user experience. The most important of these revolved around the ability for a software engineer who was not a performance specialist to get to a concrete action from the data.
- Set up a co-operative virtual team between QA and Development to manage internal and external support which has been effective in both supporting our customers and getting QA involved more deeply as product owners.

2003 – 2005

Microsoft Corporation

Redmond, WA

Senior Software Design Engineer

- Was a member of the Visual Studio Team Systems Profiler team
- Contributed to the full stack from data collection to analysis and visualizations. Primarily responsibility was for the end-to-end user experience within the Visual Studio IDE.
- Designed and implemented an asp.net helper component that is used by both the profiler and several of the test tools to manage interaction with asp.net applications.
- Designed and implemented integration between the profiler and test tools.
- Managed part of the team as a virtual lead for both Beta 2 and Release cycles. This included managing triage and acting as the team's ship-room representative in both the product unit and division ship-rooms.

1999 - 2003

theGray.com

Seattle, WA

President

- General software and Internet consulting including:
 - Technical feasibility analysis for venture capitalists
 - Web site design and deployment
 - Setup and tailoring of office automation and billing software for an alternative healthcare clinic
 - Web based survey and data-cleaning

1996 - 1998

Sunhawk.com

Seattle, WA

Vice President of Technology

- Managed a mixed team of Software Engineers, Graphics Artists, and Music Librarians.
- Implemented an e-commerce solution for downloading an encrypted file over the Internet, previewing the first page, and selling the encryption key via credit card or account.
- Implemented a distributed, object-oriented database for tracking meta-information about files for sale and price, permissions and usage.
- Implemented an internal web-site publishing tool that automatically generated the corporate web site and catalog based on user-defined templates combined with information from a database.

1989 - 1996

Microsoft Corporation

Redmond, WA

Software Design Engineer Lead (1995-1996)

- Team lead for first Visual C++ Enterprise edition
 - Lead a team of four developers
 - Worked closely with QA and PM to release a V1 product on a short ship cycle
 - Integrated database management into Developer Studio
 - Worked with adjacent teams to build ATL wizards and SQL server debugging into Developer Studio.

Software Design Engineer (1989-1995)

- Implemented custom development tools for a video compression research team
- Abstracted the core debugger functionality from the stand-alone debugger (CodeView) such that the following were feasible:
 - Multiple operating system support (DOS, Windows, NT, OS/2, Macintosh)
 - Multiple processors support (x86,68K,Alpha,PowerPC)
 - Remote, cross-platform, and distributed debugging
 - Integration of debugging functionality into IDEs (QuickC and Visual C++)
- Optimized symbol loading such that a full debug build of Excel took 20 seconds to load rather than 30 minutes on the same hardware. This enabled Offices developers to use full debug builds of their applications.
- Wrote CodeView for OS/2 2.0 (Microsoft's first 32-bit debugger)
- Wrote the integration layer for a pluggable expression evaluator in CodeView. This included writing a pseudo .dll

loader for DOS that allowed us to load the same expression evaluator .dll in DOS that we used for windows.

- Implemented long filename support and worked on OS/2 support for CodeView in C6.0

1988 (Summer) Microsoft Corporation Redmond, WA
Software Design Engineer Intern

- Designed and wrote an RTF format differencing program that included differences at multiple levels (work, sentence, paragraph) and a move operation as well as add and delete.

1985 - 1989 Center for Arts and Technology Pittsburgh, PA
Software Engineer

- Wrote a music editor for the Macintosh that included an easy to use entry system and voice analysis for use in teaching music theory (specifically voice leading and harmony).

1982 - 1985 Bethesda Computers Bethesda, MD
Sales/Technical Support

- Sold Apple II and Macintosh, and early PC Clones to walk in customers and corporate accounts.
- Performed both hardware repair and software training.
- Specialized in enabling people with disabilities to use computers.
- Software consulting including writing an integration layer for a calculus teaching program and data conversion for a stock market analyst.
- Designed and taught courses in BASIC and LOGO for younger students in the store's learning lab

Education

1985-1989 Carnegie Mellon University Pittsburgh, PA
Bachelor of Science/Applied Math (Computer Science)

1981-1985 Bethesda-Chevy Chase HS Bethesda, MD