

DAVID M. ANDERSON

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SENIOR SOFTWARE ENGINEER Specialist in Web and game development.

Skills

Extensive experience programming games and Web sites in C, C++, Groovy, Java, and JavaScript on many platforms, including HTML5, Linux, Windows, Android, Wii, DS, Xbox 360, PlayStation 2. Conversant with Python, PHP, XML, ActionScript, OpenGL, DirectX, C#. Strong ability to structure and solve problems and organize information.

Experience

University of Washington, Seattle, WA. **Extension Lecturer** Fall 2012

- Created and taught new course, *Gameplay in HTML5*.

Benaroya Research Institute, Seattle, WA. **Senior Software Engineer** 2011-2012

- Developed Web apps to access and analyze gene expression and clinical data, primarily using Groovy, Grails, Java, MySQL, and MongoDB.

Epsilon Delta, Bellevue, WA. **Founder & Senior Software Developer** 2010-present

- Developing [WorldWideCalendar.info](#) Web site. AJAX-driven using a C++ FastCGI service providing astronomical and algorithmic calendrical computation.
- Developing SIMPLE STATS and other Android apps.
- Links to these programs, source code, and more are at [EpsilonDelta.us](#).

Spiral9, Seattle, WA. **Senior Software Developer** Aug-Oct 2010

- Investigated and solved performance issues with ActionScript UI for TiVo.

SCJP (Sun Certified Programmer for the Java 2 Platform, SE 6.0) (Score: 95%)

Clean Power Research, Kirkland, WA. **Senior Software Engineer** Feb-May 2010

- Added a variety of features to company's Web sites and services using C#, ASP.NET, SQL Server, XML, XSLT.

WXP Games, Seattle, WA. **Senior Software Engineer** 2006-2009

- Developed gesture system for Wii remote and audio system for THE DARING GAME FOR GIRLS for Wii (Majesco). Implemented sliding tile puzzle for the game on both Wii and DS.
- Integrated Nvidia PhysX physics library into engine for XOTIC for Windows and Xbox 360.
- Created and managed SQL puzzle database system, including command-line tools and Web interface, for SCENE IT? LIGHTS, CAMERA, ACTION for Xbox 360 (Microsoft). Wrote user data save/load system.
- Guided setup of GREG HASTINGS' TOURNAMENT PAINTBALL MAX'D project for PlayStation 2 (Activision) and wrote memory card and audio systems.

Humongous Entertainment, Bothell, WA. Senior Console Programmer 2002-2005

On each of these projects, I wrote the systems for saving and loading user data, in compliance with the relevant standards, developing an application-independent, cross-platform API. Also handled other standards issues such as controller and optical disc errors.

- Systems programmer on PlayStation 2 and Windows versions of BACKYARD FOOTBALL 2006.
- Systems programmer on ATARI ANTHOLOGY for PlayStation 2 and Xbox.
- Took over JUNIOR SPORTS BASKETBALL for PlayStation 2 after Sony's rejection to address numerous bugs and standards violations. The game was accepted on next submission.
- Lead programmer on BACKYARD BASEBALL 2005 for Windows and BACKYARD BASEBALL for PlayStation 2. Managed switch to new framework and graphics engine. Developed a new menu graphics system.
- Programmer on BACKYARD BASEBALL for GameCube. Implemented much of user interface.

Blue Planet Software, San Francisco, CA. Senior Programmer 2001-2002

- Lead programmer on TETRIS WORLDS for PlayStation 2 (THQ). Ported Windows version, developed largely in parallel, implementing sound, user input, memory card and other platform-specific features.

The 3DO Company, Redwood City, CA. Technical Lead 1999-2001

- Programmer on WARRIORS OF MIGHT AND MAGIC for PlayStation 2. Various graphics tasks.
- Lead programmer on GROOVY BUNCH OF GAMES for Windows. Ported PlayStation library to Direct 3D. Set up build process, including copy protection and installation.
- Lead programmer on ARMY MEN - AIR TACTICS for Windows. Implemented HUD, joystick control, various projectiles, lip sync, etc. Rewrote depth-sorting algorithm. Prepared European version.

KnowWare, Fremont, CA. Senior Programmer 1993-1999

- Wrote the engine used for all of KnowWare's games for Windows and Macintosh.
- Lead programmer on THE RUGRATS MOVIE ACTIVITY CHALLENGE (Brøderbund). Created the shell and three of the activities.
- Lead programmer on SMART GAMES PUZZLE CHALLENGE 2. Built a framework allowing for arbitrary collections of puzzles. Programmed five of the puzzles.
- Lead programmer on JUMPSTART 4TH GRADE: HAUNTED ISLAND (Knowledge Adventure). Created a pseudo-3D world connecting activities, a labyrinth, and special locations. Wrote four of the activities.
- Lead programmer on SMART GAMES CHALLENGE 1. Developed the shell, including menus, scoring, tracking, and security measures for a contest. Designed one puzzle and programmed two more.
- Ported The Learning Company's DOS API (which I had played a large role in creating) to Windows and Macintosh. This was used to port SPELLBOUND and TREASURE COVE with minimal change to the code. Completely rewrote TREASURE MOUNTAIN to work with this API.
- Programmer on CHADWICK AND THE SNEAKY EGG THIEF. Wrote routines to display dialog boxes, mix watercolors, and print. Wrote Windows installation program and a hardware detection system.

The Learning Company, Fremont, CA. Senior Programmer 1990-1993

- Lead programmer on *READER RABBIT 3*. Created the shell and programmed three of the four activities. Highlights included formatting and printing a one-page "newspaper," a system for streaming animations from disk, and a WYSIWYG text editor with an innovative display of formatting codes.
- Lead programmer on *TREASURE COVE*. Programmed the behavior of the avatar (a swimmer), and designed databases for backgrounds, multiple-choice puzzlers, and animated, colored-on-the-fly sea creatures. Developed a VGA-to-EGA dithering algorithm, considerably reducing art time.
- Lead programmer on *OPERATION NEPTUNE*. Programmed action of the avatar (a submarine) and added interrupt-style handling to an interpreted language for controlling adversaries. Designed a system for editing and implementing a variety of graphically-presented math problems.
- Programmer on *ANCIENT EMPIRES*. Programmed puzzles, GUI elements, and various elements of the arcade action. Created the editor for an interpreted language for controlling adversaries. Wrote the EGA driver and much of the CGA driver in assembly language.

Won the **Turbo User Group's** 1989 Tug'O'Wards programming competition for *CONIC SECTIONS*.

Miles Inc., Berkeley, CA. Data Analyst 1987-1989

Designed, managed, and analyzed clinical *SAS* databases.

Iowa State University, Ames, IA. Instructor 1984-1987

Taught introductory and advanced courses in Economics.

Integral Research Inc., New York, NY. Senior Project Analyst 1981-1986

Designed, managed, and analyzed large *SAS* employment and economic databases. Supervised technical staff. Prepared statistical reports used in major employment discrimination legal cases.

Columbia University & Hunter College, New York, NY. Instructor 1978-1983

Taught undergraduate and graduate Economics courses. Tutored many students.

Education

University of California Extension, Berkeley. Certificate

Computers in Education. 4.0 GPA.

Columbia University, New York, NY. M.A. and M.Phil.

Economics. 4.0 GPA. President's Fellowship. Best examination in Monetary Theory and Policy. Research assistantships included a semester at CORE, Louvain-la-Neuve, Belgium.

Columbia College, New York, NY. B.A. *cum laude*

Mathematics and German. 3.7 GPA. Junior year in Munich. Awards for German scholarship. John Jay Scholarship as one of top entering freshmen. National Merit Finalist.