Chad Mowery

Objective

To work with a highly motivated team, using my experience and passion to build the best games ever.

Profile

I am a fun and energetic game developer. I have worked entire game stacks from core engine services to scalable server side game logic and have a knack for finding the right balance between getting things done and promoting the highest quality production code possible.

Summary

Languages: C/C++ (5), Lua (3), PHP (4), Objective C (4), Java (6), C# (6).
Frameworks: OpenGL (4), Android (5), iOS/OSX Cocoa (4), Unity (1), Apache (4).
IDEs: XCode (4), Visual Studio (6), Sublime Text (4), Eclipse (6), Emacs (6).
Software: Git (3), SVN (6), Mercurial (1), Mysql (4), Jira (4), Virtualbox (4), Blender (1), Photoshop (6).

Work History

Sr. Software Engineer, Machine Zone

March 2012 – Present

Games Shipped: Game of War: Fire Age, Race or Die 2, IMob 2

- Mentored new employees and lead junior developer game feature pods ensuring successful first deliverables.
- Conducted technical engineering interviews playing a major role in team staffing decisions and company scaling.
- One of three engineers to take Game of War from prototyping, to pre-production, production, and finally ship on two mobile platforms.
- Significant code contributions and ownership of over 20 game features and core systems in Game of War providing a high quality project codebase to build from.
- Designed and implemented a templated Entity Component System fundamentally changing our engine and game systems by decoupling data and logic. The outcome was much more cohesive engine services and cleaner game logic.
- Implemented a novel pool allocator interface leveraging weakly-linked unique pointers for engine-level component systems improving engine performance by reducing runtime allocations.
- Implemented and optimized core game engine texture atlasing/packing (runtime), sprite batching, and 2d animation systems.
- Implemented device accelerometer systems with shader support for 3d UI effects and more.
- Built a debug command line interface for in game debugging and on the fly modifications/hot loading massively speeding up design, engineering, and QA iterations.

- Implemented Spriter (boned sprites) runtime with full support shader and particle emitter attachment support allowing artists and designers to create really complex animation effects easily.
- As a spare time project, I designed and implemented an automated Doxygen code generation builder with web access working with existing build systems.

Software Engineer, Machine Zone

March 2011 – March 2012

Games Shipped: Global War, Original Gangsters

- Built a scalable, multi-title, server authoritative casino system including 7 mini games with full tool suite as a massive first deliverable.
- Designed and implemented the company's first multi-title tutorial system complete with plug-able metrics support and tooling allowing designers to engage more players.
- Rebuilt core project bootstrapping and structure to facilitate rapid prototyping and quickly generate new projects without the need of engineering support.
- Designed and implemented multi-title player gifting features with support tools.
- Optimized entire game test suite runtime by 75% significantly speeding up automated build processes and developer productivity.

Software Engineer, Visual Health Information

May 2010 – March 2011

- Co-built an interactive math proficiency testing web application for the Colorado Board of Education that tests and tracks student mathematics abilities and problem solving skills--a highly customer-facing product that is used daily by thousands of teachers, students, and district officials.
- Maintained a large code base of 3D rendering services supporting complete automation of flash video files from raw model data with validation using a fully integrated audit process.

Software Engineer, ManTech International Corporation

September 2009 – May 2010

- Responsible for the design, coding, testing, and integration of new system services for a distributed SOA-based tool used for the acquisition and verification of communications in a military operating system.
- Maintained and refactored key system services and components producing a more stable code base and higher rates of product efficiency.
- Operated in an agile environment collaborating with multiple development teams keeping a strong focus on key features resulting in the development of highly disciplined cross-team APIs.

Publications

Mowery, Chad., Spencer, Nathan., Bichendaritz, Isabelle. "Online Micro-Level Decision Making in Real-Time Strategy Games: A Case-Based Reasoning and Reinforcement Learning Approach." *ICCBR Workshops*, July 2010.

Education

Bachelor of Science, Computing and Software Systems (Magna Cum Laude) University of Washington - Tacoma 2010