

Ryan Juckett – Programmer

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Bellevue, WA

Work Experience

2011-Present **Bungie** Bellevue, WA

Destiny (PS4, Xbox One, PS3, Xbox360)

- **Lead Sandbox Engineer**
- Online first person shooter

2007-2011 **High Impact Games / Bionic Games** Burbank, CA

Dreamworks Super Star Kartz (Xbox360, PS3, Wii, 3DS)

- **Director of Technology & Lead Designer**
- Kart racing game

Phineas And Ferb: Across the 2nd Dimension (Wii, PS3)

- **Director of Technology**
- Third person action game

Canceled (Xbox360)

- **Director of Technology**
- Racing game prototype

Spyborgs (Wii)

- **Senior Programmer**
- Third person action game

- Led and scheduled a team of programmers to develop an engine, tool chain and gameplay logic flexible enough to simultaneously support the hardware needs of four consoles (X360, PS3, Wii, 3DS) along with PC support for the development team.
- Managed the interview process for programming, design, and QA positions. This included reading resumes, writing and distributing offsite tests, phone interviews, and in person interviews.
- Wrote game concept documents (along with pitching them to publishers), game design documents and technical design documents.
- Performed both code and level design reviews to ensure the team was working in harmony, at the desired quality and on track to meet deadlines.
- In addition to management roles, I led the code architecture and programming process. The following are some of the areas I was highly involved in.
 - Tools
 - Geometry builder (exported from Maya)
 - Animation builder (bones and morph targets exported from Maya)
 - Maya gameplay editor plugins and MEL scripts
 - Navmesh builder (from Maya geometry)
 - Data reflection system and real time editor of reflected data
 - Asset dependency system
 - Cross platform data driven material system integrated into Maya
 - Game/Engine
 - Lighting models and graphical effects on X360, PS3, Wii, and 3DS
 - Particle effects (programming and design)
 - Component based entity architecture
 - Container library
 - Memory management system
 - Math library
 - Animation graph, blend shapes and inverse kinematics
 - Car dynamics simulation including magnetic surfaces
 - Collision system and rigid body simulation
 - AI navigation, motion, and logic

- Player control and abilities
- Input system including gesture detection
- Immediate mode GUI architecture
- Camera system
- Optimization (GPU and CPU)

2007-2009

Independent Contractor

Los Angeles, CA

Contracted at multiple companies to develop and consult on artificial intelligence systems, develop gameplay systems, optimize existing codebases, and meet deadlines.

2007

Offset Software

Newport Beach, CA

Position: **Senior Programmer**

Projects: **Project Offset** – First/third person shooter (PC, Xbox360)
Offset Engine – Game engine (PC, Xbox360)

- AI system (navigation planning, goal-oriented action planning, combat logic, visibility system for automated cover detection, sensory systems, motion, ai editor, and visual debugging tools)
- Memory management system
- Interactive profiler
- Container system
- Threading architecture
- Porting the engine to the Xbox 360
- Integration of AGEIA PhysX
- Graphics optimizations (asynchronous rendering, optimizer of artist developed shaders)
- Consulting licensees on how to take full advantage of the technology.

2006-2007

Pandemic Studios

Westwood, CA

Position: **Programmer**

Projects: **Saboteur** – Third person shooter (Xbox360)

Camera system, player control, animation system, tools optimizations

2004-2006

Neversoft Entertainment

Woodland Hills, CA

Position: **Programmer**

Projects: **Tony Hawk's Proving Ground** – Skateboarding game (PS3, Xbox360)
Tony Hawk's Project 8 – Skateboarding game (PS3, Xbox360)
GUN – Third person shooter (PS2, Xbox360, Xbox, GC, PC)

- AI system for cross project use (GUN and the Tony Hawk games) including behavior logic (e.g. combat, searching, skateboard tricks), motion control, sensory systems, item system, voice logic and vehicle management
- Concurrent hierarchical finite state machine system (used by the AI, player control, and UI)
- System for node based world interaction points for AI
- Animation blending and animation derived motion
- Low level container system and memory management classes

2003

Whatif Productions

Boston, MA

Position: **Programmer**

Projects: **GameProcessor** – Game engine (PC)

- Automated generation of texture coordinates for non-photo realistic rendering effects on morphable meshes.
- Refined quaternion library and skeletal animation system.
- Automated generation of levels of detail for the physics and visual display of morphable meshes.

1997-2002

CommuniCom

Bourne, MA

Position: **Web Developer**

Designed and developed web sites using HTML, ASP, PHP, JavaScript, SQL, and Flash.

Education

2000-2004

B.S. in Real Time Interactive Simulation (Computer Science)

DigiPen Institute of Technology

Graduated April 2004

Awards: **Kisses** – 3D Social Simulation (PC)

2005 Independent Games Festival Open Category Finalist

Mall Monster – 2D Survival Horror (PC)

2003 Independent Games Festival Student Showcase Finalist

Skills

Languages

C / C++

C#

HLSL / CG

JavaScript

PHP

HTML

SQL

ActionScript (Flash)

APIs

X360

Wii

3DS

PS3

DirectX

OpenGL

PhysX

Wwise

Scaleform

Bulet Physics

Unity

Programming Tools

Microsoft Visual Studio

Perforce

SVN

PIX

GPAD

MonoDevelop

General Tools

Microsoft Word

Microsoft Excel

Microsoft PowerPoint

Microsoft Visio

Graphics Tools

Adobe Photoshop

Adobe Illustrator

Autodesk 3ds Max

Autodesk Maya

Macromedia Flash