Jack P. Oakley
Kyle, TX
(928) 830-4123
jack.oakley@guztech.net
Portfolio: http://jackoakley.guztech.net

Professional Summary: Game Programmer with a proven track record of contributing to 55+ shipped products across 29 unique titles and 18 platforms including PC, console, handheld, and VR. Specialized in Lead Programming for VR environments and Technical QA Leadership. Expert in bridging the gap between stable code architecture and rigorous quality standards to ensure "Day 1" readiness.

PROGRAMMING LANGUAGES

- **Expert/Core**: C#
- **Proficient/Recent:** C++, Python, Java, Scheme, HTML
- **Functional/Prior Experience:** TI-Basic, JavaScript, Assembly (MIPS), MATLAB, Prolog, PHP
- **Legacy/Academic:** Assembly (PIC16f1708), Visual Basic, CSS, VHDL, XML, SQL, ActionScript 2.0

TECHNICAL SKILLS

- **Game Development:** Unity, Version Control (Git/Subversion)
- **Mathematics:** Linear Algebra, Trigonometry, Calculus, Discrete Mathematics, Computational Logic
- **Software & Tools:** Visual Studio, Jira, Windows Command Line, Linux/Unix Command Line, Bash, WordPress
- **Technical Proficiencies:** Software QA Testing, Bug Tracking (Jira/Filemaker Pro), Root Cause Analysis, Technical Documentation, Debugging & Tracing, Scripting, Server Management, Cross-functional Communication
- **Platforms:** PC (Windows), Console (PlayStation/Xbox/GameCube/Wii), Mobile/Handheld (Android/PSP/Gameboy/DS), VR/AR (Meta Quest/OpenXR/SteamVR/Viveport/Pico/Omni), Distributed Systems (MMO Architecture)

SHIPPED TITLE SUMMARY (57 Total Releases)

Note: Reflects 29 unique IPs across 18 platforms. (Full credits list available at portfolio site)

Category	Platforms	Lead Roles	IC / QA Roles
Virtual Reality (6 Releases)	Meta Quest, Meta PC, OpenXR, Pico, SteamVR, Viveport	6	6
PC & MMO (4 Releases)	Windows, Server-side, Web	2	4
Console (29 Releases)	GameCube, Wii, PS2, PS3, Xbox 360	7	29
Handheld (18 Releases)	PSP, DS, GBA	4	18

PROFESSIONAL EXPERIENCE

VIEWER READY | Austin, TX (Hybrid) | 2021-Current
Development Manager (Zevo Games LLC) (2024-Current)
- Orchestrates the full Software Development Lifecycle (SDLC) for a suite of VR sports titles, utilizing Jira and Git to manage sprint velocity and meet rigorous publishing deadlines.

- Directs cross-functional engineering and QA teams, serving as the primary technical stakeholder for project roadmap and resource allocation.
- Facilitates technical post-mortems and code reviews, establishing studio-wide standards for clean, maintainable, and optimized VR codebases.

Virtual Reality Development Supervisor (2023-2024)
- Led daily stand-ups and sprint planning sessions, bridging the communication gap between design vision and technical implementation.
- Onboarded and mentored junior developers, providing technical guidance on Unity-specific VR optimization and physics-based interactions.
- Administered studio infrastructure, performing hardware maintenance and BIOS-level optimizations to ensure peak development environment performance.

VR Software Engineer and QA Lead (2021-2023)
- Architected and implemented core gameplay features using Unity C#, focusing on immersive physics and haptic feedback for multi-platform VR titles.
- Managed the deployment pipeline for 5+ concurrent platforms (Meta Quest, SteamVR, Viveport, Pico, etc.), ensuring platform-specific compliance and performance parity.
- Optimized GPU/CPU performance, identifying hardware bottlenecks to maintain stable frame rates across mobile and tethered VR hardware.

UNIVERSITY OF CENTRAL FLORIDA | Orlando, FL (Remote) | 2020-2021
Research Associate (DARPA OFFSET Project)
- Engineered autonomous drone swarm logic using Python, optimizing pathfinding algorithms and spatial distribution for complex coordinated maneuvers.
- Developed a VR/AR Command & Control (C2) interface in Unity C#, allowing for real-time 3D visualization and interaction with drone telemetry and deployment mapping.

LEARNING ENHANCEMENT CENTER AT MCC | Mesa, AZ | 2015-2018
Computer Science and Math Tutor
- Facilitated technical instruction in Object-Oriented Programming (OOP), Data Structures, and Algorithms, ensuring students mastered core software engineering principles.
- Mentored students in debugging methodologies, including stack trace analysis and breakpoint usage, to identify and resolve logic errors and memory leaks.
- Translated complex mathematical concepts—including Linear Algebra, Calculus, and Discrete Math—into practical applications for computer graphics and physics simulations.
- Developed structured lesson plans to improve students' ability to perform code reviews and write clean, maintainable, and optimized code.

ENDURANCE INTERNATIONAL GROUP | Tempe, AZ | 2012-2013
Technical Support Engineer Tier 1
- Triaged and resolved high-volume technical inquiries, guiding users through platform navigation, account configuration, and initial troubleshooting steps.
- Translated complex technical jargon into actionable instructions for non-technical users, improving "First-Call Resolution" rates and user satisfaction.
- Identified and escalated systemic bugs to senior engineering teams, providing clear documentation of user-reported issues and reproduction steps.
- Resolved high-priority technical tickets involving server-side architecture and DNS configuration.

QUEST ONLINE, LLC | Phoenix, AZ (Remote) | 2010-2012
Quality Assurance (QA) Organizer/Customer Support Rep (2011-2012)
- **Organization:** Sorted player tickets between customer service issues and bugs, passing them to the appropriate departments.

- **Team Management:** Organized large scale tests with players, QA team, Engineers, and Customer Support team and delegated small scale testing tasks to QA team.
- **Documentation:** Wrote patch notes and posted them after issuing a patch to the live server.
- **Cross-functional Communication:** Helped respond and interface with players to get further information on issues that were encountered and offered solutions to technical difficulties while triaging reported bugs.

Quality Assurance Analyst (2010-2011)
- Ensured network stability for a server-based MMO, performing stress tests and latency analysis to improve player concurrency.
- Performed validity checks on player reported bugs, added additional needed details and reproduction steps before assigning them to the appropriate engineers.
- Utilized subversion to maintain versioning to keep live, staging, and dev server states separate until intended.

D3PUBLISHER OF AMERICA, INC. | Tempe, AZ | 2006-2009
Quality Assurance Senior Tester (2008-2009)
- **Leadership & Training:** Orchestrated the onboarding and technical training for a team of 10+ new hires, ensuring adherence to studio-standard testing protocols.
- **Stakeholder Facilitation:** Acted as a primary liaison between the QA department and Lead Developers; facilitated weekly syncs to prioritize critical bug fixes and milestone readiness.
- **Team Management:** Managed a distributed team of testers, delegating tasks across multiple project modules to optimize test coverage.
- **Documentation:** Orchestrated the creation of test plans and facilitated writing walkthroughs to improve the efficiency of team members gaining familiarity with projects.

Quality Assurance Tester (2006-2008)
- Executed comprehensive QA test plans and performed root cause analysis for engine-level crashes.
- Executed end-to-end functional testing and identified critical edge cases to ensure software stability throughout the Development Lifecycle (SDLC).
- Documented and tracked technical defects using Filemaker Pro, providing detailed reproduction steps and crash logs to the engineering team.
- Performed regression testing to validate bug fixes and ensure new code deployments did not negatively impact existing game mechanics or performance.
- Collaborated with cross-functional teams to streamline the bug-reporting pipeline, reducing the "Time-to-Fix" for high-priority blockers.

ARID PARADISE, LLC | Phoenix, AZ (Remote) | May 2007
Contracted Quality Assurance Tester
- Examined game through functional testing and identified incorrect/inconsistent behavior.
- Documented and tracked bugs via Excel, providing detailed reproduction steps and to the development team.
- Performed regression testing to verify bug fixes and ensure updated code deployments did not negatively affect the game's stability.

SELECTED PROJECTS

Impossible Geometry VR Experience | *Unity, ShaderLab, C#, Blender*

- Engineered a custom shader to manipulate the render pipeline, prioritizing internal face rendering over external geometry to create a real-time "impossible object" effect in VR.
- Developed and optimized a sideloadable Android APK for VR headsets, ensuring high-frame-rate stability and consistent performance.
- Managed the end-to-end asset pipeline, including custom 3D modeling and UV texturing, to support unique mathematical visual requirements.

Automated Blend Shape Configuration Tool | *Unity C#, Editor Scripting*

- Architected a designer-facing tool that streamlines the 3D character pipeline by allowing artists to procedurally map and blend shapes via a custom Inspector interface.
- Implemented a modular data-handling system that enables complex object-to-object blending without requiring manual code adjustments for new assets.
- Reduced technical art overhead by creating a "drag-and-drop" workflow for configuring multi-object blend values.

Numerical Analysis & Calculus Suite | *TI-Basic, Algorithmic Logic*

- Programmed a comprehensive mathematical engine to perform complex numerical integrations, including Simpson's Rule, Trapezoid Rule, and Midpoint Rule.
- Designed a variable-driven UI that handles user input to solve multi-variable calculus and geometric equations (e.g., Pythagorean Theorem) with high precision.
- Optimized algorithmic logic to work within the hardware constraints of embedded systems, ensuring efficient calculation speeds.

Web Development & Systems Project (Personal/Freelance) | *HTML, PHP, MySQL, DNS*

- Architected and maintained full-stack web environments, managing domain configurations, FTP/SFTP protocols, scripts (HTML/PHP) and database management (MySQL).
- Optimized site performance and security, implementing SSL certificates and troubleshooting script errors to ensure a seamless user experience.
- Self-managed the end-to-end deployment pipeline, from local development to live server environments.

EDUCATION

Master of Science – Computer Science
University of Central Florida, Orlando, FL

Bachelor of Arts – Game Design
Collins College, Tempe, AZ

Associate in Science with High Distinction
(Classes include Honors Object-Oriented Programming)
Arizona General Education Credit with Distinction
Mesa Community College, Mesa, AZ

AWARDS AND CERTIFICATIONS

Eagle Scout
Phi Theta Kappa Honor Society Alumni
CRLA Master Level Certification
CITI: Human Subjects Research (Group 2) Certification

RESEARCH PAPERS AUTHORED

The Effects of Gesture Presentation in Video Games (Thesis)
Moving Toward an Ecologically Valid Data Collection Protocol for 2D Gestures in Video Games