



Bryan Alec Quero

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PROFESSIONAL SUMMARY

Software Developer specializing in real-time systems and production pipelines, with 15+ years of experience building tools, automation, and interactive applications across games, XR, and AEC/BIM. Strong background in Unreal Engine, Unity, Roblox, Blender, and BIM/DCC ecosystems, with a focus on scalable architecture, workflow optimization, and developer-friendly tooling. Known for bridging art and engineering, diagnosing pipeline and asset issues, and enabling teams to ship faster through clean, maintainable, production-ready systems.

CORE SKILLS

Tools & Pipeline

- Asset pipeline design from DCC to engine (import/export, naming, LODs, materials, prefabs/Blueprints)
- Tooling & automation for artists (editor utilities, batch processing, templates, documentation)
- Real-time optimization: draw calls, instance, LODs, lightmap and texture management

Engines & DCC

- Unreal Engine (materials/shaders, Blueprints, Niagara, editor workflows)
- Unity (tooling, prefabs, scene management)
- Autodesk ecosystem & BIM: AutoCAD, Revit, Navisworks, BIM360
- DCC: Blender, Maya, 3DS Max, Photoshop, other 3D content creation tools

Programming / Scripting

- Python scripting for tools and pipeline automation
- C# / C++ / Blueprint for engine-side tooling and gameplay prototypes
- JavaScript/TypeScript, React, Three.js for web-based 3D tools and visualizers

Collaboration & Workflows

- Cross-functional collaboration with Art, Design, Engineering, and Production
- Version control and collaborative workflows (Git; familiarity with Perforce-style practices)
- Remote/async workflows, technical documentation, and training for art teams

PROFESSIONAL EXPERIENCE

Software and XR Developer & Technical Artist | 3D60 Creations — Remote

Dec 2008 – Present

- Design and maintain content pipelines from DCC tools into Unreal and Unity for XR and game prototypes, ensuring consistent import settings, naming conventions, and optimized assets.
- Build reusable materials/shaders, master materials, and template Blueprints to speed up level dressing and character/prop integration.

- Create tools and scripts (Python, engine editor utilities) to batch process assets, automate scene setup, and reduce repetitive work for artists and designers.
- Troubleshoot asset-related issues (scale, normals, UVs, collisions, lighting artifacts) and work directly with artists to unblock production.

Digital Designer / BIM & Real-Time 3D | Deployed Resources — Remote

Dec 2023 – Present

- Build and maintain standardized BIM and 3D workflows for large-scale temporary infrastructure (tents, trailers, mechanical layouts), ensuring clean handoff from design to visualization.
- Create real-time 3D visuals and interactive content for internal and client-facing tools, leveraging Unreal/Unity and BIM data.
- Define templates, layers, and naming standards in AutoCAD/Revit/Navisworks to keep models' pipeline-friendly and ready for export to real-time engines.
- Collaborate with cross-discipline stakeholders (engineering, operations, marketing) to translate requirements into repeatable, documented processes and digital tools.

Software Developer (E-Commerce 3D Visualization) | Harley-Davidson via BCG — Remote

Dec 2020 – June 2021

- Built a Three.js/React-based 3D product customizer and associated asset workflow, connecting DCC exports to a performant web experience.
- Defined export settings, material guidelines, and asset organization to keep the pipeline consistent as new products and variants were added.
- Worked with product and design teams to iterate on tooling and UI, focusing on reliability, clarity, and performance for a broad user base.

Contract Software Developer & XR Technical Artist | Various Clients — Remote

- Developed educational simulations and interactive XR experiences, designing asset pipelines tailored to each client's DCC stack and target hardware.
- Prototyped physics-driven and multiplayer mechanics while maintaining clean separation between game logic and content pipelines.
- Created documentation, quick start guides, and video walk-throughs so artists and designers could confidently work within established tools and workflows.

Technical Artist (Contract) — University of Southern California (ICT) | Jul 2020 – Sep 2022

- Collaborated to develop innovative real-time content pipelines and technical art systems, fostering enhanced teamwork across art, design, and engineering disciplines.
- Improved materials, shaders, and overall scene performance to ensure smooth and interactive experiences on targeted hardware platforms.
- Established clear standards for the workflow between digital content creation (DCC) and engine integration, including naming conventions and detailed export/import checklists, which significantly reduced the potential for errors.
- Created robust automation tools for batch processing and validation, resulting in improved asset turnaround times and maintaining a high level of consistency.
- Composed comprehensive documentation and quick start guides, enabling artists and researchers to contribute effectively while aligning seamlessly with engineering initiatives.

Contract Tools & Pipeline Technical Artist — Metaverse Team (NDA Client Work) | Jun 2022 – Dec 2022

- Roblox FPS — Nerf Strike! (Jun–Aug 2022): Developed and maintained a creator pipeline for importing and exporting assets into Roblox Studio, standardizing naming conventions, LODs, and material rules to ensure consistent runtime performance.
- Created internal tools to improve asset validation, batch processing, and content handoff between DCC and the engine, reducing iteration times for artists and designers.
- Additionally, produced comprehensive documentation, quick start guides, and video walkthroughs to facilitate understanding and adoption of the pipeline among artists and designers with minimal support.

Game Design Instructor | The DAVE School — on-site

- Taught students' best practices for asset creation and integration into Unreal/Unity, emphasizing pipeline and collaboration.
- Guided students through building small-scale tools, editor utilities, and repeatable content workflows to support their capstone projects.

AOA | 3D Artist, BIM Manager & Developer Hybrid — On-site / Hybrid

- Managed BIM standards and asset libraries for MEP systems, enforcing naming, layer, and documentation conventions across large projects.
- Built early AR/VR prototypes in Unity and Unreal from BIM data, refining the process of taking complex construction models into performant real-time visualizations.

CPH Engineers | BIM MEP Designer — On-site

- Produced design and coordinated BIM deliverables for Mechanical, Electrical and Plumbing systems, maintaining high data integrity for downstream visualization and analysis.

SELECTED TECHNICAL ART & PIPELINE PROJECTS

- **Digital Twin / Theme Park Projects (WDI – Star Wars: Galaxy's Edge, Ratatouille, Guardians of the Galaxy)**
Supported BIM and 3D content workflows used in high-profile themed entertainment projects, contributing to clean, well-structured models suitable for visualization and downstream real-time uses.
- **Web-Based 3D Customizer (Harley-Davidson)**
Delivered a full pipeline from DCC tools to a React/Three.js experience, including asset standards, material setups, and performance-minded rendering configuration.
- **XR Game & Metaverse Prototypes**
Built and iterated on real-time pipelines for multiplayer and physics-driven prototypes, focusing on rapid iteration with artists and designers while keeping content workflows stable and repeatable.

EDUCATION

MFA, Game Development — Academy of Art University

Full Stack Developer — University of Central Florida

BFA, Computer Animation — International Academy of Design

AFA, Graphic Design — Atlantic College

CERTIFICATIONS

Unity Certified Developer Unreal Engine Fundamentals, XR|VR Developer Certification, and React Professional Certification.