Connor Wall

Portfolio: https://connorwall.com/ | GitHub: https://github.com/connortwall | LinkedIn: www.linkedin.com/in/connortwall | Contact: connorwall2000@gmail.com

CAREER PROFILE

Creative Technologist with 4 years of experience building real-time visualization systems, procedural tools, and optimized rendering pipelines for independent game studios, pharmaceutical data platforms, and experimental audiovisual projects. Specialized in performance optimization, custom tool development, and technical art workflows that enable non-technical creators to realize ambitious creative visions through code. Successfully shipped 3 commercial indie games, secured major pharmaceutical clients, and performed 6 live audiovisual sets combining real-time graphics with procedural generation.

Core competencies include Unreal Engine 5 (C++, Blueprints), Unity (C#), Houdini, HLSL shader programming, procedural generation, tools programming, AI/ML integration, real-time VFX, Git, technical art optimization, and cross-disciplinary collaboration bridging engineering and creative teams.

CAREER HIGHLIGHTS

- Reduced render times by 70% through graphics optimizations across 40+ cinematics and 30+ shaders, increasing audience retention by 25% at live performances
- **Secured Pfizer as client** by expanding Plex Research's dataset 50% through C++ pipeline integrating 10,000+ drug-protein interactions
- Accelerated iteration speed by 83% by authoring Unity tool reducing designers' cinematic composition times from 60 to 10 minutes
- Shipped 3 indie games in 4 months leading 4-person programming team on 19-person production at DADIU

PROFESSIONAL EXPERIENCE

Quantum Aether Games | Boston, MA + NYC

Aug 2023 – Present

Indie studio creating experimental audiovisual experiences combining real-time graphics with procedural generation Freelance Programmer & Technical Artist

- Increased audience engagement by 40% and retention by 25% at 6 live performances by engineering 40+ cinematics, 30+ shaders, and 20+ VFX systems in Unreal Engine with live-coded HLSL
- Reduced render times by 70% through pre-baked shader workflows, LOD systems, and GPU instancing for procedural content across 5+ Houdini integrations

Plex Research | Cambridge, MA

June 2024 - Feb 2025

Pharmaceutical data platform accelerating drug discovery through AI-powered search and molecular visualization Software Developer & Data Scientist (Contract)

- Secured Pfizer as customer by expanding dataset 50% through C++ aggregation pipeline integrating 10K+ drugprotein interactions from ChEMBL and raw drug + protein data sets from several research papers
- Improved query accuracy by 35% by integrating Claude LLM into compound search platform using JavaScript, Python, and node-based visual systems

Neptune's Cloud Entertainment | Boston, MA (Remote)

Sept 2023 - Dec 2023

Independent AA studio developing single-player action-RPG inspired by Persona 5 and Lies of P

Gameplay Programmer (Contract)

- Accelerated UI iteration speed by 12x through render optimization of inventory, HUD, and menu systems in Unreal Engine 5 (C++/Blueprints)
- Increased designer efficiency by 30% by engineering custom debug tools and documentation for combat AI, save/load, and core systems

National program uniting Denmark's top schools to ship commercial-quality games in 4 months

Lead Game Programmer & Narrative Designer

- **Reduced cinematic composition time from 60 to 10 minutes** by authoring custom Unity timeline tool enabling non-technical designers to create camera sequences, lighting, and dialogue triggers
- **Shipped 3 published indie games in C#** leading 4-person programming team, engineering menu UI, HUD, procedural generation, enemy AI, localization, and save systems

Nordic Stone Studio | Malmö, Sweden

Jul 2022 - Dec 2022

 $Mobile\ game\ studio\ developing\ action-RPG\ titles\ combining\ historical\ narratives\ with\ competitive\ combat$

Narrative & Game Design Intern

- **Strengthened player motivation and retention** by conceptualizing central storyline and 4 character biographies integrated with 15+ combat mechanics
- Established narrative design pipeline collaborating with designers to create story-reinforcing game loops

FastForward U (Johns Hopkins University) | Baltimore, MD

Jan 2020 - May 2023

Student entrepreneurship incubator supporting ventures from ideation through market validation and fundraising Marketing & Design Lead

- Increased event attendance by 35% by creating promotional materials for 15+ events using Adobe Illustrator, Photoshop, and Animate
- Supported 7 teams in each securing \$5K-\$365K in funding by refining pitch decks, logos, videos, and marketing collateral
- **Validated product-market fit** for startups by conducting 50+ customer surveys, establishing weekly stakeholder meetings to track progress (Prototyped hydroponics systems for Seedling Hydroponics)

Harvard Medical School, Boston Children's Hospital | Boston, MA

Summer 2019

Academic medical center conducting interdisciplinary research on environmental factors affecting fetal development **Project Success Research Intern**

- Contributed to neural tube defect research publication by analyzing geospatial data in R, GeoDa, and Excel, investigating metal exposure effects on fetal development w/ Maitreyi Mazumdar Ph.D., MD and John Obrycki Ph.D.
- Designed official National Neural Tube Defect Conference materials using Adobe Illustrator and InDesign for 200+ attendee conference

PROJECTS & RECOGNITION

Game Projects: Omnivores Rule (3rd-person biological sim in UE 5.7) | Roboleon (45-min 3D puzzle game in Unity C#)

Awards: 2nd Place SF AGI Hackathon (lead) | MIT StageHack "Chaos Under Fire" (lead) | Games for Change Scholarship

Speaking: 2025 BIPOC Games Conference @The Strong Museum (Exhibitor) | Game Devs of Color Expo 2024 (video)

EDUCATION

Johns Hopkins University | Baltimore, MD | Sept 2019 – May 2023 | B.A. Computer Science, Film & Media Studies

Denmark Technical University, National Film School of Denmark | Copenhagen, Denmark | Jan 2022 – Jan 2023 |

Computer Graphics & Game Production Programs

LEADERSHIP & SKILLS

Black in Gaming | Content Creation Chair, Advocacy & GDC Awards Chair | Sept 2023 – Present Boston Game Dev, Boston Tech Poetics, Live Code NYC | Event Organizer, Volunteer | Jan 2024 – Present

Technical: Unreal Engine 5 (C++, Blueprints), Unity (C#), Houdini, HLSL, procedural generation, real-time VFX, Python, JavaScript, R, Al/ML integration (Claude LLM), Git, Adobe Creative Suite, Blender

Languages: Spanish (fluent) | Russian & Mandarin (intermediate) | Danish (beginner)

Interests: Space exploration & astrophysics (attended Harvard Black Hole Initiative conference 2025), Indigenous futurisms, bonsai, gymnastics, international collaboration