Vega (Xuan Bai)

Senior Technical Artist | AI Workflows & Real-Time Art

CA, US · Open for relocation | vegabeyond@gmail.com | 801.557.3807 | vegabeyond.com | LinkedIn

· Combines AI-assisted development and LLM API integrations with game development techniques, from creative concept to implementation and optimization.
· 9 years across games and immersive experiences, with technical ownership from pipeline prototyping through production automation and maintenance.

Selected Projects

Road Trip: Ahead One July 2026 - Present

Blender • Three.js • Procedural Generation • AI-Assisted Solo Project

- Owned AI-assisted game development from concept through playable browser delivery.
- Developed a workflow from concept art to optimized Blender assets and Three.js content.
- Implemented procedural routes and environments driven by geographic map data.

AI Chat Avatar 2023

UE5 • OpenAI API • Azure AI Speech • Blueprint • Real-Time Character

- Designed and built a UE5 conversational avatar for a sales-assistant demo.
- Integrated STT, OpenAI responses, and Azure TTS into an end-to-end conversation pipeline.
- Implemented viseme-driven lip sync and Blueprint locomotion for real-time interaction.

Professional Experience

Product Developer / Senior Technical Artist

Oct 2020 - Present

Manticore Games

Out of Time, a multiplayer online rogue-lite game built on Core Platform
Core Platform, a multiverse game engine and platform for play and create user generated games

UE5 • 3D Content • C++ • Python • Blueprint • PowerShell • Lua • JavaScript • Jenkins

- Primary owner of the Core-to-UE pipeline underpinning Out of Time, including concept, design, validation, implementation, expanding and maintenance.
  - Designed multiple asset-specific processing for native Unreal editing and open-world setup.
  - Shader simplification reduced shader instructions by 25% on average.
  - Evolved manual conversion into daily Jenkins automation (500+ runs).
- Built Unreal editor tools for asset creation, management, validation, info collection and diagnostics.
- Worked directly with 20+ artists to collect production requests and feedback and translate those needs into DCC and Unreal tooling.
- Automated Blueprint generation and setup for audio and Niagara systems.

Content Group Lead / Technical Artist

Oct 2017 - Mar 2020

Archifiction Inc.

n'Space, an immersive projection system including hardware console, software support, and content creation/deployment

UE4 • 3D Content • Houdini • Blueprint • VR • Projection Systems • Procedural Tools • VFX

- Established the content team's production workflow as a founding member, spanning asset handoff, technical review, and deployment.
- Created art and technical-art content across shaders, VFX, and interactive environments for projection and VR experiences.
- Developed Houdini procedural/VFX tools and managed asset pipelines for immersive project.
- Led project scope, agile delivery, and outsourcing; delivered 15+ Unreal experiences with hardware, software, and marketing teams.

Technical Skills

AI & DCC WORKFLOWS

Multi-AI-assisted workflows
LLM API integrations • ComfyUI
Maya • Houdini • Blender
Substance Painter • PCG

UNREAL & REAL-TIME ART

Unreal Engine 4/5 • Open World Setup
Shaders • Niagara/VFX • Lighting
Asset Management • Prototyping
Profiling & optimization

PIPELINE & PROGRAMMING

Python • C++ • Blueprint • GLSL
JavaScript • Editor & DCC tools
Jenkins • Perforce • Git

PRODUCTION

Cross-functional collaboration
Leadership • Project scoping
Documentation • Iteration
Technical Troubleshooting
Outsourcing management

Education

Master of Game Dev, Technical Art

University of Utah
2015 - 2017

Published thesis game on PS4

BS, Microelectronics

Shanghai Jiao Tong University
2011 - 2015

Minor: Computer Technology and Application
Advanced Mathematics •
Software Engineering •
Digital Logic & Circuit Design

LEADERSHIP

Vice President · 2023-Present
University Alumni Association
Large event organizing
Creative campaigns & delivery