

Gujianyi 故剑遗

UE5 client / gameplay programmer · AI-assisted delivery

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Portfolio site gujianyi-resume.pages.dev

Looking for: UE5 Client / Gameplay Programmer · AI-assisted delivery | Location: Any city (remote OK) | Availability: Immediate | Salary: Negotiable

Highlights

4 yrs of UE Blueprints — Learning and building since first touching Unreal in 2022

1 game shipped on Steam — OMEGA — built by a two-person team

1 yr of hand-written C++ — A full GAS framework, tracked in Git from day one

1 website built & shipped — Model World — full stack + DeepSeek API

Projects

Civitas — Web Edition [Medieval fantasy city-builder RTS · Playable online · Built with AI agent collaboration](#) 2026

I own the architecture layers, data contracts, and acceptance criteria; the output is implemented in parallel by multiple AI agent windows (director / client / design / QA / art / audio). A playable medieval city-builder and real-time strategy web game: PixiJS rendering + React UI + a pure TypeScript simulation layer, with a custom MCP tool server and 20+ automated regression suites (300+ assertions) — every change green before deploy.

- My technical decisions: three-layer architecture (sim / game / ui), 4Hz logic vs 60fps rendering, save-version migration
- Engineering: 20+ regression suites (300+ assertions) + an architecture guard script
- AI workflow: custom MCP tool server, multi-window collaboration rules, in-browser data editor
- Full gameplay loop: building, resources, training, expeditions, raid defense, achievements

OMEGA [3D card-battler roguelike · Shipped on Steam](#) Mar 2025 – Jun 2025

Owned all programming in a two-person team (my partner handled art and direction); took the game from zero to a shippable build in 3 months — released on Steam.

- Implemented and debugged all in-game features in Blueprints
- Split of work: I wrote all the code, covering the full pipeline from development to release
- Zero to launch in 3 months; 6 characters, ~100 cards, 50+ battles and random events

GAS — Hand-written in C++ [Hand-written episode by episode following Aura; upgraded to the latest UE5 version](#) Jul 2025 – Jul 2026

Following Unreal's Gameplay Ability System course project Aura, hand-wrote the full implementation in C++ episode by episode. Unlike the course's pinned old engine version, I upgraded to the current UE release with per-episode compatibility fixes (the course code fails to compile as-is on current engines) — Chinese comments throughout, and every commit actually runs.

- Every episode has its own Git commit; all code hand-written with Chinese comments
- Upgraded to the latest UE version with per-episode compatibility fixes — the course's pinned version won't run on current engines
- Covers Attribute Sets, Gameplay Effects, Abilities, and network replication
- Not a fork · 384 commits · a full year of span — all verifiable online

3D Models In-Game — Android [Importing self-made 3D models into Unreal, running on a phone](#) 2025 – 2026

Import self-made 3D models into an Unreal project in real time, adapted to Android with new touch interactions; the same content runs on both phone and PC.

- Integrated ALSv4 locomotion — walk, run, jump, crouch
- Integrated UDS (Ultra Dynamic Sky) for real-time day/night and weather
- Added touch controls: tap to zoom, long-press to scale up
- One project, two platforms: mobile packaging with on-device debugging — real device footage

Bubble Tetris [Global Game Jam 2025 entry](#)

Jan 2025

Built the core random-drop logic for bubbles during a 48-hour game jam, and provided the project template so teammates could develop in parallel.

- Wrote the main bubble random-drop logic
- Provided the project template the team built on

Dragon's Tale [Global Game Jam 2024 entry](#)

Jan 2024

Implemented the logic behind the game's CG sequences.

Model World [A 3D-print model showcase platform, designed and built solo](#)

2026 · Personal · Live

Designed, built, and shipped a model showcase website from scratch with React + Vite, integrating the DeepSeek API; includes accounts, comments, likes, and file uploads — fully bilingual.

- A real product online: Cloudflare Pages + Functions + database + object storage
- Accounts: sign-up, login, email-code password reset
- Chinese/English switching, mobile-friendly

Skills

Game Engines Unreal Engine 5 / UE4 (4 years) : Since 2022; Blueprint-driven development, C++ in progress · GAS (Gameplay Ability System) (1 year hands-on) : Hand-written episode by episode following Aura · Network replication / multiplayer (Course + hands-on) : DruidMech's multiplayer shooter course — built the key replication parts and a session system (Session) from scratch · ALSv4 locomotion (Project experience) : Character movement in the Android project · UDS dynamic sky (Project experience) : Real-time day/night and weather · Computer Graphics (GAMES101) (Course study) : Rasterization / geometry / ray tracing / simulation · Game Engine Architecture (GAMES104) (Course study) : Engine layering, render pipeline and tooling

Languages C++ (1 year hands-on) : Foundations from Heima's C++ course; Unreal framework and hand-written GAS · Unreal Blueprints (Proficient · 4 yrs) : All features in a shipped commercial game · Lua / UnLua (Familiar) : Syntax and hot-reload concepts · JavaScript / React (Project experience) : Heima frontend course + independently built and shipped a website

Tools Git / GitHub (Solid habit) : Branching; a full year of commits on GAS · Visual Studio / Rider (Daily use) : C++ development environment · Android packaging (Project experience) : End-to-end Unreal mobile adaptation

Art & DCC Blender (Basic) : Modelling for 3D printing and game import · FDM 3D printing (Production experience) : Modelling to printing to selling · Photoshop / AE / AU (Basic) : Image editing, video and audio editing

Work & Education

Shishen Entertainment [UE4 Blueprint Engineer](#)

Mar 2025 – Jun 2025

Built every gameplay system of OMEGA in a two-person team and shipped it on Steam.

Self-study & Personal Projects [2022 – Present](#)

First touched Unreal in 2022 — four years of continuous learning since; after leaving the studio, full-time on projects:

- 2022–2024: completed 20+ hands-on Unreal projects (UE 4.26 → 5.6) following tutorials and technical notes — Blueprints / C++ / UMG / AI behavior trees / animation (Control Rig) / networking / mobile
- Procedural animation practice: a dinosaur Control Rig, built from a Zhihu blogger's notes, plus my own fixes for project stability issues
- Hand-written GAS C++ project, one full year, committed episode by episode
- Followed DruidMech's multiplayer shooter course — built the key replication parts and a session system (Session) from scratch

- Android Unreal project: ALSv4 locomotion + UDS dynamic sky + touch controls
- Studied GAMES101 (computer graphics) and GAMES104 (game engine architecture)
- Designed and shipped the Model World website (React + DeepSeek API)

Nanyang Vocational College of Agriculture [Computer Application Technology](#) · Associate degree 2022 – 2025

Key courses: Front-end design, Programming fundamentals, Computer basics



Online portfolio

Scan for all projects, gameplay footage and the latest version
gujianyi-resume.pages.dev