NICK (QIANZHE) LI

Los Angeles, CA | qianzhel@usc.edu | (917) 704-1015
https://www.gamernickli.com/

EDUCATION

University of Southern California Sept. 2024 - May 2026
Master of Science, Computer Science, Game Development Track
GPA: 3.70/4.00

New York University, Tandon School of Engineering Sept. 2020 - May 2024
Bachelor of Science, Computer Science
GPA: 3.76/4.00 | Dean's Honor List | Minor in Game Engineering

EXPERIENCE

BlueHeaven Games Jun. 2026 - Present
Co-Founder / Co-Director & Gameplay Engineer Los Angeles, CA
Developing B.L.U.E., a modular spaceship-building and combat game in Unreal Engine 5, continued from a 20-person USC production

- Enabled server-authoritative multiplayer for player-built ships of up to 150 parts by replicating ship-graph data and essential ship state, keeping physics simulation on the server while clients handle visualization and prediction.
- Solved flight control for arbitrary engine layouts with a per-tick propulsion solver that converts linear and rotational goals into coordinated engine thrust with no significant performance impact observed in current testing.
- Reduced designer and engineering dependency with data-driven tools, including tutorial sequencing from placed checkpoints/targets and a priority-based Input Mapping Context manager for transitions such as flight and ship-building modes.
- Translate feature ideas into implementation plans and lead engineering meetings for a six-person studio, aligning technical decisions and ownership while helping deliver the USC Games Expo demo and prepare a Steam Next Fest build.

PROJECTS

Third-Person Action Game Framework (Unity) Dec. 2025 - Feb. 2026
Engineer Los Angeles, CA
No-code gameplay authoring framework for designers, animators, and artists to build and tune combat content without programming

- Eliminated programmer dependency from weapon authoring by designing a no-code workflow for attacks, timing windows, resource costs, hitboxes, and branching combo routes.
- Replaced manual row-by-row combo-link entry with a drag-and-connect graph editor and runtime debugging tools, reducing equivalent authoring time by ~15% in comparative workflow testing.
- Decoupled input, gameplay actions, animation, VFX, and SFX so designers, animators, and artists can integrate and iterate on combat content with minimal engineering dependency.

Amalgam - Studio Project (Unreal, team of 10) Mar. 2024 - Aug. 2024
Gameplay Systems Programmer Remote
Third-person action prototype focused on fast traversal, shooting, responsive controls, and rapid gameplay iteration

- Established the movement and combat foundation for a fast-paced traversal experience by implementing wall-running, double jump, recoil, camera behavior, and reusable weapon logic used throughout development.
- Partnered with designers to prototype and tune traversal and shooting mechanics, enabling rapid iteration on movement feel and combat response.

Node-Based Dialogue System + Graph Editor (Unity) Oct. 2025 - Dec. 2025
Engineer Los Angeles, CA
Visual authoring tool for reusable branching dialogue without hard-coded conversation flow

- Removed hard-coded conversation flow by building a visual graph editor and runtime runner where designers can author reusable conversations with choices, conditions, branching outcomes, and multiple end nodes.

LEADERSHIP

USC Kendo Club Sept. 2025 - May 2026
President Los Angeles, CA

- Led operations for a ~20-member club, organizing twice-weekly practices, a seminar with a visiting Japanese kendo instructor, and travel/logistics for events at Stanford (~8), UCSD (~5), NYU (~20), Harvard (~3), and UCLA (~20).

SKILLS

Programming: C++, C#, Python, JavaScript, SQL, Java, GLSL
Game Development: Unreal Engine 5, Unity, Gameplay Systems, Multiplayer Networking, AI, Editor Tools Development, Gameplay Debugging
Version Control / Tools: Git, Perforce, Diversion, OpenGL, Maya, ZBrush, AutoCAD, GameMaker Studio 2
Languages: English, Mandarin, French, Japanese