Hemal Patel

908-300-4557 | hemalpatel2990@hotmail.com | LinkedIn | Youtube

PROFESSIONAL SUMMARY

Software Engineer with extensive experience building server-authoritative multiplayer systems and custom Unreal and Unity editor tools. Proven record of delivering high-impact features for live-service products, including optimizing core systems for 80%+ performance gains and reducing art workflows by 30%. Strong background in Unreal Engine internals, multiplayer networking, and engine transitions, with a collaborative, mentorship-driven approach. Adept at operating in lean, fast-paced startup environments with a history of end-to-end feature ownership.

SKILLS

Languages: C++, C#, Lua
Game Engines: Unreal 4, Unreal 5, Unity
Programming Skills: Gameplay Systems, Multiplayer, Online Game Development, UI Systems, Physics
Core Competencies: Problem Solving, Teamwork, Communication, Adaptability, Mentoring, Technical Design, Leadership
Tools: Perforce, Github, Visual Studio, Rider, VSCode, JIRA
AI Tools: Claude, Gemini, Copilot

EXPERIENCE

Software Engineer II (Senior Gameplay / Systems Focus) Nov 2019 – Dec 2025
WaveXR *Remote*

- Spearheaded a mission-critical core social initiative: Nexus, leading the team to successful integration and adoption as a foundational system.
- Functioned as a solo engineer on rapid-response initiatives, executing full-stack development (Gameplay, UI, Backend integration) to deliver critical features outside the primary roadmap cycle.
- Performed rapid prototyping to validate gameplay mechanics for stakeholders, allowing the team to 'fail fast' and pivot direction before committing significant resources.
- Architected and implemented server-authoritative, state-synchronization systems enabling users to dynamically change visual elements across a persistent, live server instance.
- Provided technical guidance and mentorship to multiple developers on the creation of diverse and scalable interaction systems, ensuring adherence to engine best practices and performance standards.
- Worked with the team on successful engine transition from Unity to Unreal, simultaneously architecting and implementing some of the core interaction features (e.g. Custom Niagara Components, Single Niagara Subsystem per client).
- Integrated foundational backend services (e.g., user accounts, party system) with gameplay systems, ensuring reliable and scalable cross-platform data synchronization.
- Engineered and optimized robust, low-latency gameplay systems for dedicated multiplayer networking environments, ensuring highly synchronized and scalable player experiences.
- Developed multiple proprietary tools within the Unreal Editor, resulting in a quantifiable increase in workflow efficiency for the Art team (e.g., reducing scene setup time by 30%).
- Applied deep engine-level expertise and Unreal Profiling tools (e.g., Unreal Insights) to refactor and optimize various core systems (e.g., memory management, rendering), resulting in substantial performance gains of over 80% across the application.

Contract Unity Programmer Nov 2015 – Feb 2020
Razor Edge Games *Remote*

- Engineered core gameplay loops including turn-based combat, inventory, and survival mechanics, implementing custom logic for dynamic boss encounters and player tracking.
- Led the integration of open-source hair/fur simulation and holographic UI shaders, troubleshooting complex mesh-to-spline data format conflicts.
- Created custom internal tools that streamlined the content creation pipeline, reducing iteration time for artists and designers on a large-scale open-world project.
- Contributed to a major DLC release by diagnosing critical bugs and maintaining technical documentation to ensure project transparency.

Unity Developer   Jun 2014 – March 2015
Smartcloud Infotech Pvt. Ltd.   *Pune, India*
- Shipped interactive commercial applications using Unity, including *Alimentary Avengers*, *Tafe Planetary Plus*, *E-Smart*, and the informative app *Be Safe, Be Smart!*
- Consulted with clients to define project scope and provided accurate project estimations, along with process improvement suggestions.
- Implemented and iteratively refined UI/UX and gameplay features based on direct client feedback and requirements.

EDUCATION

DePaul University   Online
MS in Computer Game Programming   *Coursework Completed (Capstone Pending)*
CEPT University   India
Master of Business Administration. Information Technology and Project Management   *2014*
Gujarat Technological University   India
Bachelor of Technology in Information Technology   *2012*