NAITIK PODDAR

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PROFESSIONAL SUMMARY

Gameplay Engineer with hands-on experience shipping games in Unreal Engine 5 and Unity. Proven ability to architect core gameplay features, work on gameplay networking systems, and develop data-driven tools to enable designers. Passionate about collaborating with cross-functional teams to solve complex technical challenges and create engaging, high-performance, and memorable player experiences.

SKILLS

Programming Languages: C#, Python, C/C++, GLSL
Web Development: Javascript, HTML, CSS, Typescript, React, Node.JS, WebGL, OpenGL
Design and Tools: Gameplay Systems Design, Git, Perforce, Figma, Miro, Agile/Scrum Framework, LaTeX
Data Analysis and Modeling: Stata, Python, R, Excel, SQL
Game Development: Unreal Engine 5 (C++), Unity, Phaser.JS, Game Design, Graphics/Shader Programming

PROFESSIONAL EXPERIENCE

Goyangi Games **Santa Cruz, CA, USA**
Software Developer *September 2024 - Present*

- Shipped core online multiplayer for Tacit, a 4player actionRPG targeting Steam Q4 2025, using Unreal Engine 5, C++, and the Gameplay Ability System.
- Led collaborative updates to the spell system—including new mechanics such as auto-target, spell holding, and buffs—directly improving user engagement and sentiment in ongoing playtests.
- Architected lowlatency replication pipeline, reducing average roundtrip lag by 22% (35ms) via predictive movement smoothing & RPC batching.
- Implemented realtime spellcasting framework supporting 30+ unique abilities; datadriven design cut designer iteration time by 40%.
- Integrated Steam Online Subsystem, enabling lobby matchmaking & secure P2P play for 100+ closedalpha testers.
- Steam Link: https://store.steampowered.com/app/3670530/Tacit/

General Mortgage Capital Corporation **Remote**
AI Chatbot Freelance Contract Developer - Internal Business Assistant *May 2025 - Present*

- Built a production-ready backend AI business assistant using Node.js, Express, and Google Gemini, architecting a custom Retrieval-Augmented Generation (RAG) pipeline for robust, document-driven REST API query handling and scalable enterprise deployment.
- Engineered intelligent document ingestion with multimodal support (PDF, DOCX, PPTX) and dynamic web scraping via Puppeteer and LlamaParse, supporting scalableinformation retrieval across over 40+ internal documents leveraging advanced vector-embedding database structures.
- Developed and maintained feedback-driven QA workflows and document ingestion pipelines, incorporating duplicate detection, expert ratings, and deterministic test questions to continuously drive accuracy and raise employee satisfactionscores
- Delivered a cost-effective solution, saving the client $50k+ versus large firm alternatives, while resolving major accuracy challenges in the RAG pipeline and improving cross-document query relevance and overall efficiency.

PROJECTS & OUTSIDE EXPERIENCE

Shooter? I Hardly Know Her (Unity3D Online Multiplayer Game - Planned Steam Release)
Programmer and Designer

- Developed core gameplay systems in C#, including player movement, enemy AI, and animation programming, optimizing performance for smooth online play.
- Designed and implemented a weapon spawner and swapper system, enabling strategic mid-match loadout changes; game received an 8.3/10 average rating across 30 closed playtest sessions.
- *Link to project*

Automanora (Unity 3D Game)
Programmer and Designer

- Engineered core gameplay features, including player movement and an intuitive inventory system, in Unity3D using C#.
- Enhanced player experience by optimizing saving/loading functionality by 20% and adding polished visual effects.
- Collaborated in a team of five to deliver a cohesive, award-winning project, earning the "Best Aesthetic" award as voted by peers for its standout design.
- *Link to project*

Conversational Procedural Content Generation with LLMs (Typescript, Phaser) – FDG 2025, PCG Workshop (Published) & AIIDE 2025 (Submitted)

- Designed and implemented interactive map generators to study LLM-driven procedural generation, culminating in a published paper at the FDG 2025 PCG Workshop (available via ACM Digital Library).
- Co-developed Pewter, a novel natural language tilemap generation system that interprets user prompts to create interactive 2D game maps; paper currently under review for AIIDE 2025.
- Focused on innovations in tilemap representation, prompt structuring, and context-driven content selection to enhance LLM responsiveness and reliability in PCG pipelines.
- *Link to project*

Shinobi Survivors (JavaScript, Phaser.js)
Solo Developer

- Built a 2D survival game using Phaser.js, implementing state machine architecture for player actions and enemy AI to ensure clean, modular code.
- Designed object-oriented systems with polymorphic entities, programmed intelligent enemy behaviors with pathfinding and cooldown management, and created a real-time combat system featuring projectiles, piercing mechanics, and upgradeable abilities.
- Developed progressive gameplay with unlockable powers, integrated physics-based collision detection, and built a dynamic UI with health bars, cooldowns, and upgrades.
- *Link to project*

EDUCATION

University of California - Santa Cruz **September 2021 - August 2025**
Bachelor's, Computer Science: Game Design *GPA: 3.75*

- Relevant Coursework: Game Systems and Programming, Data Structures & Algorithms, C Programming & Computer Systems, Web Programming

University of California - Santa Cruz **September 2021 - August 2025**
Bachelor's, Economics *GPA: 3.75*