NAITIK PODDAR

+1 (408) 679-4110 | naitikpoddar145@gmail.com | Santa Cruz, CA, USA | LinkedIn | GitHub | Portfolio

PROFESSIONAL SUMMARY

I'm an aspiring software developer and game programmer with a passion for developing engaging experiences that could potentially impact large communities. I'm highly motivated to break into the games and tech industry, continuously learn new technologies, and refine my skills in a professional environment.

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*
- Relevant Coursework: Econometrics, Statistics, Causal Inference, Game Theory, Machine Learning for Economics

PROFESSIONAL EXPERIENCE

General Mortgage Capital Corporation **Remote**
AI Chatbot Freelance Contract Developer - Internal Business Assistant *May 2025 - Present*
- Built a production-ready AI business assistant using Google Gemini and a custom Retrieval-Augmented Generation (RAG) pipeline for document-driven responses and customer query handling
- Engineered intelligent document ingestion with multimodal support (PDF, DOCX, PPTX) and dynamic website scraping using Puppeteer and LlamaParse
- Designed adaptive retrieval logic (quick, deep, and hybrid modes), boosting agent accuracy and response times across diverse query types
- Developed a feedback-based training system with duplicate detection, expert ratings, and auto-curated Q&A generation for continuous model improvement
- Integrated secure session tracking, role-based admin tools, and automated email reporting with PostgreSQL and Backblaze B2 cloud storage
- Tech: Node.js, Express, PostgreSQL, Gemini API, Puppeteer, LlamaParse, Backblaze B2, HTML/CSS/JS, Vector Embeddings, RAG Architecture

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.
- Architected lowlatency replication pipeline, reducing average roundtrip lag by 22% (35*m*s) 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/

SKILLS

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

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*