Lowell Batacan

Education

University of California, Santa Cruz - Master of Science in Games and Playable Media *Graduated March 2025*

California State University Channel Islands - Bachelor of Science in Computer Science, Minor in Game Development Graduated May 2018

Southern California Regional Occupation Center - Certification in Game Design and Graphic Design Completed 2012

Work Experience

Level 1 IT Support | Integrated Security Solutions Inc. - Los Angeles, CA | September 2020 - January 2022

- Collaborated with CCTV O&M engineers to maintain network security systems, handling tickets and working with technicians to troubleshoot and resolve issues
- Utilized project management tools such as Microsoft Teams to coordinate project pipelines and tasks for members

Projects

Kwyjibo Adventure | Released March 2025

- Capstone project for UCSC GPM program in collaboration with a team, taking on role of 2d/3d artist, environment artist, and technical artist, as well as assisting programmers and designers
- Engineered a dynamic NPC generation system in Unity, utilizing C# to randomize character appearances through clothing variations and color palettes
- Created 3d models and designed background environments, optimized scene rendering by integrating and customizing a third-party Toon Shader asset, enhancing visual fidelity while maintaining performance

LLM Dating Sim | April 2024

- Game was developed in Godot and uses Gemini API. The core gameplay involves talking with the AI character to gain favorability and increase the relationship levels
- Created systems like unlocking features, such as locations and extra mechanics to interact with AI if the player increases relationship levels through positive interaction
- Gemini API keeps track of the conversation flow and generates responses in JSON format, Game Manager is coded in GDCscript and parses JSON response to display NPC sprite and text dialogue

Hanae Royal Flower Picker | March 2021 - April 2021

- Developed in Unity, a top down 2d pixel art story-driven game where you help a village by picking flowers for them.
- Designed and implemented a lite quest system using Inkle's Ink, creating modular dialogue and progression systems that allowed for dynamic character interactions and story-driven gameplay
- Developed a day system and environmental progression mechanics, enabling players to unlock new areas and experience evolving narratives over five in-game days

Shoot o Treat | November 2019 – January 2020

- Personal project designed as an exercise in FPS gameplay and level design, focusing on practical application of game mechanics and AI implementation within a 3D environment
- Developed core FPS gameplay mechanics, including player movement, weapon systems, and projectile behavior, proficiently implementing fundamental action game systems within Unity
- Implemented BreadCrumb AI for enemy navigation and behavior, and designed a dynamic wave spawner system to create engaging and progressively challenging combat encounters

Skills

Programming Languages: C#, C++, Python, Java, Lua
Project Management: Microsoft Teams, ClickUp, Trello, Jira

Al Tools: Gemini API, Godot LLM

Tools: Visual Studio, GIT, Unity, Unreal, Godot, Love2D, Blender, Medibang, Aseprite, Microsoft Office, Google Suite, OBS Studio, PRTG Network Monitor

Other: Problem-solving, Debugging, Optimization, Technical Documentation, Systems Design, Object-Oriented Programming, Prototyping, Project Management, Agile, Teamwork, Adaptability, Strong Communication

Other Projects

Al VTuber | June 2024

- Final project for AI in Games course for UCSC GPM program, coded in Python
- Created an AI that uses Gemini API as backend to respond to Twitch chat, connects to Twitch livestream of account with Twitch Stream Key to access and read messages
- Designed prompt that details personality and response format to enable parsing of data into various systems such as text-to-speech via Edge TTS and sprite rendering via PyGame

Trip by 8-Bit | May 2024

- Project for Game Studio course in UCSC GPM program, in collaboration with a team as an exercise to design a game themed around the emotion of nostalgia, a walking simulator to collect memories
- Engineered dynamic pixelation system and memory collection triggers, linking visual effects and narrative progression to create a cohesive and emotionally resonant player experience.
- Designed and implemented accessible UI features for dialogue and scrolling speed, demonstrating a focus on player experience and system customization

Tantalus | March 2024

- Final project for Level Design course for UCSC GPM program
- Developed in Godot in collaboration with a team, each member designed a section of a 3d level with gameplay based around traversing a large tree, combined each section in at end for a cohesive game experience
- Used Cyclops Level Builder to allow for easier prototyping and design with level design tools
- Using Kenney 3D Platformer Kit, modified the code to allow for flexible 3d camera movement with mouse, added extra abilities such as sprinting and double jump

Gacha-mon | March 2024

- Project for Alternative Controllers course in UCSC GPM program, a collaborative project to design an experience that utilizes a custom built device for gameplay
- Designed and implemented a functional gacha system within Godot, including a randomized monster selection and inventory management that is tied to turn-based combat
- Developed a custom alternative controller using a Microbit and breadboard, translating physical inputs from a
 potentiometer and buttons into emulated keyboard commands for seamless in-game interaction.

International Student Visual Novel | March 2024

- Project for Serious games course for UCSC GPM program
- Developed in RenPy in collaboration with a team, game revolves around the story of an international transfer student and the struggles they face when adjusting to their new life
- Was responsible for coding and narrative design, programming branching dialogue, stress system, and free-time system which allows players to choose how to spend free time and reduce stress and increase other stats

Dross | November 2021 – January 2022

- Developed in Unity, designed top-down 2d pixel game and revolving around the theme of cleaning ocean pollution
- Developed mission system that progresses the story and transitioning levels upon clearing pollution in an area, triggering dialogue events at the throughout the levels
- Utilized Inkle's Ink plugin to write dialogue, create dialogue system to display character sprites and text in visual novel format, designed UI with custom art and Unity Canvas