Corbyn LaMar

Technical Game Designer and Gameplay Programmer

in/corbyn-lamar | 907-406-0549 | gocorbyn@gmail.com | www.corbyn-lamar.com

Skills

Languages: C/C++, C#, Unreal Blueprint Visual Scripting, Java, Python
Software: Visual Studio, Git, GitHub, SVN, Perforce, Figma, Valgrind, Doxygen, Blender
Engines: Unity Engine, Unreal Engine, C++ Custom Engine
Programming/Math: Object-Oriented Programming, Data Structures, Memory Management, Network Programming, Algorithm Design/Analysis, Agent Artificial Intelligence, Code Reviews, Pairs Programming, Unit Testing, Code Documentation, Engine Architecture, JSON Serialization/Deserialization, Debugging, Linear Algebra, 3D Vector Math, Calculus, Discrete Mathematics
Specializations: Gameplay Mechanics, Gameplay Tools/Automation, Level Design, Procedural Generation

Projects

Technical Level Designer | Gameplay Programmer [Academic Project] **August 2024 - Present**
***Eidolon: Fate of Fools* | 3D Arena First Person Shooter (Unreal, Blueprints & C++)** **7 Person Interdisciplinary Team**

- Developed networked arena mechanics including the player and weapon spawning systems, bounce pads, and a propulsion tunnel tool along a spline that can propel players and projectiles along its path in order to provide designers more level tools.
- Designed and gray boxed 2 multiplayer arena shooter maps, integrating gameplay and level features that promote strategic movement.

Technical Designer | Quality Director [Bun Bun Games] **April 2023 - October 2023**
***We're Tethered Together* | 2D Puzzle Platformer (Unity, C#)** **10 Person Interdisciplinary Team**

- Curated 5 levels to adapt to evolving game mechanics, ensuring a dynamic and engaging player experience throughout development.
- Documented and systematically resolved reported bugs from the project's issue log.
- Implemented tools such as a cutscene manager and an audio persistence tool.
- Refined gameplay mechanics such as doors with buttons, moving platforms, and the eye threat manager.
- Applied code reworks for different systems to offer controller support.
- Published on Steam on October 13th, 2023 and showcased by Seattle Indies at the Washington Gaming Expo 2024.

Technical Designer | Gameplay Programmer | Creative Director [Academic Project] **August 2023 - April 2024**
***Cats N Critters: A Dungeon Claw-er* | 3D Top Down Dungeon Crawler (Unity, C#)** **10 Person Interdisciplinary Team**

- Implemented a procedurally generated dungeon using a multi-step modular constructionist approach with wave function collapse.
- Added unit testing, seeding, and telemetry to level systems to optimize room count and gameplay time for peak engagement.
- Engineered gameplay mechanics like moving platforms and environmental triggers to enhance interactive elements.
- Created visual effects for abilities, character actions, and environments to enhance the feel and feedback of our gameplay systems.
- Maintained the game's vision by crafting user stories, organizing documentation, and aligning ideas to support team cohesion.

Systems Programmer | Co-Producer [Academic Project] **August 2022 - July 2023**
***Inline: Out of Time* | 2D Time Attack Action Platformer (Custom Engine, C++)** **12 Person Interdisciplinary Team**

- Coded the graphics engine architecture using OpenGL, managing the graphics & render pipeline development.
- Implemented core engine functionality, such as the mesh manager, graphics system, and a JSON serializable particle system.
- Engineered gameplay systems, such as delivery objectives, dynamic objective targeting, a dynamic camera, and user interface systems.
- Collaborated on the game production cycle utilizing weekly sprints and task documentation, leading the game to be published on Steam on March 29th, 2024.

Systems Programmer | Gameplay Programmer [Academic Project] **January 2022 - April 2022**
***Nowhere to Grow* | 2D Puzzle Adventure Platformer (Custom Engine, C)** **6 Person Programming Team**

- Created a seamless tilemap and object loading process by deserializing CSV files generated from Tiled.
- Designed and implemented a player state machine, streamlining action management and player animation.
- Crafted a camera system with parallax effects incorporated into background visuals.
- Engineered trigger areas using bitmasks, enabling game object interactions and collisions to be finely controlled within the project.

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Game Jam Projects

Level Designer **August 2024**

Tropical Raceway **| Unreal Fest 2024 Seattle (UEFN) | 12 Hours** **5 Person Interdisciplinary Team**

- Built a Rocket Racing track using Unreal Editor for Fortnite (UEFN) during a one-day Epic Games-hosted event in collaboration with 5 people.
- Shaped track layouts by whiteboarding road designs and refining spline paths for smooth gameplay flow.
- Engineered mechanics for slow-down zones and optimized turns to enhance track playability and excitement.
- Conducted iterative playtests, gathering feedback from Epic employees and UEFN creators, and making real-time adjustments to improve the player experience.

Gameplay Programmer **January 2024**

Tumbleweed Simulator **| Global Game Jam 2024 (Unity, C#) | 48 Hours** **7 Person Interdisciplinary Team**

- Developed core gameplay mechanics, including checkpoint tracking, a timer, bounce obstacles, and kill planes.
- Implemented responsive camera controls based on a spherical character controller.
- Integrated and animated artist-provided UI assets for a unique in-game HUD and main menu.

Gameplay Programmer **July 2023**

Fernando's Italian Slice House **| GMTK Game Jam 2023 (Unity, C#) | 48 Hours** **4 Person Programming Team**

- Designed randomizable tilesets and backgrounds adding variety to the game's environment.
- Engineered fish joints using Unity physics for dynamic and responsive character movement.
- Created a moving chef character as a kill plane increasing tension as players navigate the pizzeria.
- Built a Cinemachine-based camera system to dynamically track the player character within bounds and padding.
- Developed an in-game options menu and integrated audio assets.

Experience

Class Instructor **June 2024 - August 2024**

Open World **Redmond, WA**

- Instructed STEM classes developed for students within the K-12 age group.
- Simplified complex engineering, robotics, technology, and game design concepts to teach to the target audience of given classes.

Teacher's Assistant - System Design Methods **January 2024 - April 2024**

DigiPen Institute of Technology **Redmond, WA**

- Guided students in comprehending principles and practices for effective system design.
- Offered constructive feedback to enhance students' proficiency in designing scalable and efficient systems.

Teacher's Assistant - Level Design Methods **August 2023 - December 2023**

DigiPen Institute of Technology **Redmond, WA**

- Assisted students in understanding methods for designing 2D and 3D spatial environments.
- Provided feedback to students on techniques for procedural level content control and player guidance.

Barista **June 2021 - August 2022**

Starbucks **Redmond, WA**

- Collaborated actively and communicated effectively with 8 team members at a time to maintain workflow.
- Efficiently handled multiple tasks and met both deadlines and order qualifications to meet customer satisfaction.

Education

Bachelor of Science in Computer Science and Game Design **April 2025**

DigiPen Institute of Technology **Redmond, WA**

- Dean's List (2021 - Present)

Awards

Overall Design Award **April 2019**

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2019 FIRST Robotics Tech Challenge World Championship Houston **Houston, TX**

Certifications

CompTIA Network+ **May 2021**

TestOut Corporation

- Credential ID 6-1C6-BXWPE

CompTIA A+ **May 2020**

TestOut Corporation

- Credential ID 6-1C6-264H7