Aaron Brey

Technical Designer

Orlando, FL.
www.linkedin.com/in/aaron-brey-282231279/
https://4ullstop.github.io/abreyportfolio/index.html

Education

Full Sail University
Game Design B.S.

Experience

Virtual Production Assistant | Full Sail University

FEB 2023 - MAY 2024

- Problem-solved cutting-edge technology within the Virtual Production landscape including Live Link, Motion Capture, Sequencer, and Xbox Controller Support in Unreal Engine 5.
- Assisted in troubleshooting areas of poor performance with various optimization techniques including reduced draw calls, and the elimination of collision detection.
- Wrote blueprint scripts and C++ code to tackle technical tasks from Production managers.

Projects

Team Five Guys | Trilingual

JAN 2024 - MAY 2024

- Combined animations with animation blueprints and montages for player hands, using animations and models supplied by artists.
- Designed, prototyped, and developed blueprint code for rune writing puzzle mechanic and associated level.
- Extensively iterated on paper designs/prototypes, garnered feedback, and implemented based on playtests.
- Optimized using Unreal Insights to track down problematic areas across the entire map.
- Created blueprint scripts for core puzzle gameplay, scanning mechanics, rune definition comparison, and NPC interactions.
- Collaborated/communicated with the art team to produce conceptualized art pieces including various animations and models.

Personal Development | Seen (Working Title)

SEP 2024 - PRESENT

- Program basic player actions including, walking, and looking using the Raylib and GLFW.
- Design and develop an interaction system in a Procedural Programming environment using C.
- Code a collision detection algorithm that responds through various calculations using the player's velocity and vector spaces.
- Develop a custom Collide and Slide collision response algorithm congruent with collision detection.
- Design and develop a system incorporating drawing and checking collisions for all models worldwide.
- Research various game development methods, including mathematical documentation, and translate them into code to fit into the current workspace.

Blue Autumn Studios | Project Potion

JUL 2023 - NOV 2023

- Utilized animation blueprints and montages with PaperZD flipbooks to bring enemies to life.
- Designed and developed blueprint code for enemy AI and game mechanics including potions and camera controls.
- Wrote detailed technical documents on design ideas, code, and team member's tasks.

Core Skills

Jira, C, C++, Trello, Scrum, GitHub, Blender, Kanban, Perforce, Fast Learner, Confluence, 3D Math, Unreal Engine 4 & 5, Blueprint Scripting, Computer Science, Data Structures, Algorithms, Agile Development, Procedural Programming, Multi-tasking, Unreal Engine Replication, Object-Oriented Programming, Unreal Engine Sessions Interface, Creative Problem Solving, Rapid Prototyping, Self-Starter, Highly Self Motivated, Game Engine Development.