BENJAMIN OPERHALL
TECHNICAL DESIGNER

Benjaminoperhallgames@gmail.com
(215) - 512 - 6778 | Philadelphia, PA
Portfolio
Linkedin

SKILLS

Engine Knowledge: Unity, Unreal Engine, Decima

Design proficiencies: Technical Design, Ability Design, Combat Design, Enemy Design, Systems Design

Programming proficiencies: C#, C++, Unreal Blueprint, Node Graph

Dev Skills: Rapid Prototyping, Technical Design Documentation, Agile Development, Gameplay Tools Creation, Live Service Development Experience

WORK HISTORY

Sony Bend Studios | **P2 Technical Designer** Aug 2022 - Jun 2025

- Acted as a main expert on ability design and creation, helping to craft over 30 different ability prototypes and seeing 15 achieve active development and refinement
- Facilitated system design breakdowns to unify team cohesion and enhance cross-discipline understanding of goals.
- Rapidly designed and prototyped key player mechanics to interact effectively with the game world.
- Provided technical support to designers for implementing new gameplay systems and established tools and interfaces to assist development.

Healthy Design | **Unity Developer And Technical Gameplay Designer** May 2021 - Aug 2022

- Spearheaded rapid prototyping and development of therapy-oriented gameplay with the Unity Game Engine
- Created adaptive physical adjustment system, reducing user errors by 60% to broaden ICU patient engagement.
- Planned and implemented networked multiplayer activities engaging patients and family members
- Collaborated with medical experts to craft user-friendly UI interfaces accessible to diverse patients

The Digital Abacus | **Technical Systems Designer** May 2022 - July 2022

- Developed node-based level creation tool to simplify level design processes.
- Iterated puzzle levels using information from repeated QA feedback sessions
- Designed math education-focused puzzle mechanics to align with educational objectives
- Wrote key design documentation linking established educational goals with gameplay systems.

PROJECTS

Unannounced Upcoming Multiplayer Game **Sony Bend Studios**

- Established initial design intent for key player mechanics used throughout the game environment
- Helped coordinate multi-studio collaboration to best utilize existing engine features.
- Created interface to allow for designers to quickly modify and adjust physics based tool systems.

Unannounced (Canceled) Live Service Game **Sony Bend Studios**

- Developed and overhauled gameplay systems to operate in a server authoritative real-time environment
- Oversaw development of modular combat ability systems, establishing gameplay architecture pipelines for long term generation of combat based content.
- Helped establish proper gameplay script structures to cut compile time down from 15 minutes to 10 seconds.
- Prototyped synergistic ability kits to best identify key areas of engagement with players
- Collaborated with VFX Artists to create a dynamic explosion effect system, replacing over two-thirds of the games explosions with detonations that would vary depending on environmental game mechanic factors.

Your Kitchen **Healthy Design**

- Kitchen Simulator Therapy Game in which players would attempt to cook meals using a physical arm controller
- Created digital interface linking an in-house controller concept and a Unity Game Environment
- Implemented adaptive adjustment system in C# to optimize controller sensitivity and range, enabling full access to game space regardless of player age/health
- Mapped cooking mechanics to align with physical arm movements of the player controller

Linkages **The Digital Abacus**

- Experimental math puzzle game intended to help educate students on math concepts using abstract puzzle systems
- Hired as solo developer, designed primary game mechanics and prototyped example levels and puzzles
- Organized regular meetings with key stakeholders to maintain cohesion between game design direction and stakeholder intent
- Ran QA sessions to gather feedback on key puzzle mechanics and iterate on level design

Achromatic **College Capstone Project**

- Single Player First Person Horror Game in which a haunted carrousel horse stalks the player
- Shipped independent title on Steam and Itch, achieving successful launch and visibility.
- Operated as the Technical Design Lead, coordinating game direction with programming team.
- Developed light-based visual rendering shader as a core gameplay mechanic.
- Utilized Unity's ShaderLab and Cinemachine cameras to enhance cinematic moments.

EDUCATION

Champlain College - Burlington VT
B.S In Game Design 2018 - 2022
GPA : 3.864 Deans List : All Four Years