

DEREK H. WILLIAMS

Pixel Artist/Designer

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EDUCATION

Carnegie Mellon University, Class of 2024
Entertainment Technology Center, Pittsburgh, PA
Masters of Entertainment Technology

The Pennsylvania State University, Class of 2015
College of Engineering, State College, PA
Bachelor of Mechanical Engineering

SKILLS

Unity	Pixel Art - Aseprite
Godot	Level design
Shader Graph	C#
FMOD	Mechanical Design

PROFESSIONAL EXPERIENCE

Project Aurelian • Godot *May 2023 - Jan 2024*
Lead Pixel Artist & Design Generalist

- **Animation:** Drew combat abilities with a varying frame length method to increase impact and efficiency, implemented in engine.
- **Level Design:** Designed 3 concept level layouts to fill narrative and gameplay needs, referencing renaissance architecture and city layouts to aid in authenticity.
- **Level Decoration:** Finalized level art from bespoke sprite sheets with deliberately limited palette, utilizing Godot's lighting tools to represent various times of day.
- **Collaboration:** Brainstormed and iterated on a turn-based combat system in biweekly design meetings. Worked alongside a concept artist and UI artist to develop a unified art direction.

Freelance/Contract work • Aseprite *March 2019 - Aug 2022*
Pixel Artist

- **Pixel Art:** Delivered assets to game studios and individuals, ranging from concept art, to backgrounds, to animated illustrations.
- **Highlights:** Crafted an animated backdrop for Kacey Musgraves' Red Rocks show on a two-day deadline. Designed a full set of block textures and UI menus for Minecraft partners, to be sold on Minecraft Marketplace.
- **Social Media:** Maintained a twitter account with over 4000 followers to attract business.

Knoll Inc. *Sept 2019 - May 2020*
Product Design Engineer • Special Products Group

- **Testing/Iteration:** Conducted structural testing of furniture, following the latest BIFMA standards to ensure safety in new designs.
- **Management:** Oversaw the drafting of assembly and production level drawings, signing off on their correct completion.
- **Collaboration:** Worked directly with world renowned designers to achieve a balance between aesthetic and mechanical function.
- **Optimization:** Wrote and presented cost analysis briefs to lower mechanism cost to 20% below marketing targets.

GAME PROJECTS

Dusk to Dawn • Unity *Jan 2024 - May 2024*
Artist • Design Lead

- **Design Prototyping:** Designed, built, and pitched an early mockup of a pixel art ARPG, dynamically lighting 2D sprites with hand drawn normal maps and casting shadows in 3D.
- **Level Design:** Greyboxed various level layouts to facilitate design exploration and discovery pertaining to art style limitations.
- **Combat Design:** Authored enemy behavior documentation, state flow charts, and desired parameter lists for programmers.
- **Animation:** Implemented run cycles and attacks, and authored their complex animator behaviors to trigger sounds and script methods.

Two x 4 Racing • Unity *Nov 2022 - March 2023*
Carnegie Mellon University

- **Design:** A wacky, fast-paced cooperative time trial game with large custom bike wheel steering hardware. Finalist in the Alt.Ctrl showcase at GDC 2023.
- **Car Physics:** Coded 3 vehicle physics controllers to fit changing gameplay needs. Methods range from Unity's built in wheel colliders to an approximated suspension system.
- **Hardware:** Handmade 2 steering wheel controllers made of bike tires, plywood, RC car gearing, a wooden spoon, and an Arduino.
- **Level Design:** Iterated race track level design, focusing on smoothing the learning curve and providing challenges later in the race.