

DEREK H. WILLIAMS

Game Designer

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EDUCATION

CMU **Pittsburgh, PA**
Master of Entertainment Technology **Expected 2024**

The Pennsylvania State University, Class of 2015

College of Engineering
Bachelor of Mechanical Engineering

GAME PROJECTS

Two x 4 Racing, Level Designer, Mechanical Designer, Programmer **Pittsburgh, PA**
Building Virtual Worlds - CMU ETC *Nov 2022*

Working closely with a team of 4 other students, produced a racing game with custom hardware on a three-week schedule

- Manufactured custom steering wheels using 29" bike wheels and wood to evoke a more frantic game feel
- Led design review meetings with the team, and iterated track design decisions based on playtest feedback
- Iterated on a force-based vehicle controller script, after feedback suggested the vehicle should feel more responsive
- Designed track layout to give players an easier learning curve and more challenge toward the end

Unity - Big Dark House Project **Pittsburgh, PA**
Personal Project *Nov 2021-Aug 2022*

- Designed and playtested a JRPG style combat system, with the aim of better representing the movement and tempo of melee combat
- Animated main character run cycle and idle state, then implemented them using unity animator
- Drafted 6 enemy visual, stat block, and combat moveset designs
- Implemented a unique sprite shader which utilized Unity URP's native lighting to cast realistic 3D shadows from a sprite
- Maintained a standard 32-color palette to cultivate a cohesive visual theme

SKILLS

Unity Engine Development

C#

Shader Graph

Character Design

Aseprite

Maya

OTHER EXPERIENCE

Freelance Pixel Artist **Pittsburgh, PA**
Self-Employed *March 2019 – Aug 2022*

Collecting clients from Twitter and Reddit, I delivered art assets ranging from concept art, to backgrounds, to animated storybooks

- Held onboarding meetings to discuss scope, deliverables, and pricing with perspective commissioners
- Drafted first look sketches to ensure the clients satisfaction with the direction, composition, and color palette
- Provided two opportunities for iteration of design, to keep overhead and timeline in check
- Worked within a two-day deadline to deliver an animated backdrop, showcased at Kacey Musgraves' 2019 Red Rocks show

Vertical Plotter & Frame (Polargraph) **Hagerstown, MD**
Personal Project *Nov 2018- June 2019*

- Designed and drafted a plotter head that could actuate markers along its center axis, making control more intuitive
- Interpreted and edited existing software to suit my hardware's needs, transforming images into G-code to be fed to the motors
- Wired/soldered a custom circuit to handle plotting data, control motors, and power the system
- Sourced old hickory planks to craft a custom shadow box that would hide electrical components and house the chalkboard