DAVIN WAMBOGO
Game Designer & Gameplay Programmer

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:https://terpconnect.umd.edu/~davinwam/DWPortfolio/

PROJECTS

Enja's Journey
Game Designer & Programmer, Turn Based RPG   📅 10/2023 - 12/2023
- **Game Designer & Programmer:** Developed initial design documents and implemented the RPG's core mechanics, including the battle system.
- **Level & UI Designer:** Designed and implemented the world layout and created and animated UI elements such as menus, HUD, and battle UI.
- **Other:** Created textures, and developed shaders for models and special effects.

Taxes and Tenacity
Game Designer & Programmer, Top Down Action Rogue Lite   📅 10/2023 - 10/2023
- **Game Designer:** Developed the game's economy, enabling strategic investment in permanent upgrades or temporary boosts, enhancing gameplay depth.
- **Gameplay Programmer:** Programmed core game mechanics, including player combat and movement, camera polish like looking ahead of movement direction, character stats, and enemy AI.
- **Animator:** Made animations for the game including player and enemy attacks.

Got Steam, Punk?
Game & Level Designer, *Task Manager Platformer*   📅 09/2021 - 11/2021
- **Game Designer:** Designed the player's moveset with a mix of momentum based and non-momentum based movement to give them control at high speeds, but also some chaos to match the tone of the game.
- **Level Designer:** Designed and constructed the layout of the steamship, including task sequencing, with a focus on allowing the player the visualize the paths that they can radially swing.

RELEVANT COURSEWORK

CMSC425 Games Programming   📅 08/2023 - 12/2023
- Learned about the **architecture of games**, mesh properties, collision, AI Agents, networking, and physics.
- Made use of Unity features such as **scriptable objects and Unity Events**, as well as C# interfaces to reduce coupling.
- Created a **turn based RPG** with 5 environments, 13 enemies, 6 classes each with 5 spell, 54 pieces of gear.

CMSC427 Computer Graphics   📅 01/2024 - 05/2024
- Implemented foundational algorithms for 3D rendering such as mesh generation, texture mapping, camera projection, **physically based rendering**, and ray tracing among other modern effects.
- Made a three color cel shader in Unity using hlsl, with extra effects such as rim lighting and **granular control** of shadow colors.

MATH431 Geometry for Computer Applications   📅 08/2023 - 12/2023
- Mastered topics in projective geometry and **Linear Algebra**, emphasizing algorithms for computer graphics, Including affine transformations, projective space Stereographic projection Quaternions.

ARTT479D Immersive Virtual Environments   📅 01/2024 - 05/2024
- Gained expertise in immersive art creation with **Maya** and Unity, focusing on 3D modeling, interactive virtual spaces, and digital storytelling, honing skills in lighting and user interaction programming.
- Modeled, Textured and lit **four scenes,** both in Maya and for Game Engines and created **an animation** including a humanoid model with which I also made.

OTHER EXPERIENCES

Game Development Club   📅 09/2021- present
- Led teams in multiple game jams to the **creation of three games**.
- **Conducted workshops** on Post Processing for club members.
- **Presented** three game development projects at university events.

ServiceNow Software Engineer   📅 01/2022 - 08/2022
- Implemented ServiceNow solutions for IT service systems and forms.
- Owned code **from design to delivery**, ensuring alignment with user requirements.

UMCP Esports Club Organizer   📅 09/2021 - present
- **Organized in-house gaming tournaments,** fostering community engagement and teamwork.
- Designed and implemented strategies to increase club membership and engagement among students.

EDUCATION

University of Maryland College Park
Bachelors of Science: Immersive Media Design
Bachelors of Science: Computer Science

SKILLS

Programming
C#   C++   Blueprint   C   HLSL
Java   HTML   CSS   Javascript   Webgl

Software
Unreal Engine   Unity   Maya   Blender
Substance Designer   Substance Painter   Git
Photoshop   Illustrator

Soft Skills
Creative Thinking / Problem Solving / Documentation / Word and Excel / Adaptability / File Management / Flexibility / initiative / Attention to Detail

AWARDS & HONORS
- **Member of UMD Dean's List, 2023**
  University of Maryland College Park
- **Member of UMD Honors College, 2020**
  University of Maryland College Park
- **AP Scholar with Honor, 2020**
  CollegeBoard
- **IBCP Certificate Receiver, 2020**
  The International Baccalaureate
- **President's Education Awards Program,**
  U.S. Department of Education

FAVORITE GAMES
Monster Hunter
Horizon Zero Dawn
Xenoblade Chronicles
League of Legends

HOBBIES
Basketball
Bass guitar
Digital art
Manga
Piano