# KIRK DANIEL G. CAPONPON

As a game developer and community manager, I aim to create strong-willed communities by uniting diverse talents for collaborative development. Given the intricate collaboration across multiple departments, I aim to lead teams in crafting enduring and impactful experiences, recognizing the unifying power of games.

#### Education

#### University of Michigan-Dearborn

Bachelor of Science in Computer Informational Science

GPA: 3.80

# Relevant Coursework

- Unity 2D & 3D Game Development
- Unreal Engine 3D Game Development
- Intro to C# & Xbox Game Development
- Experiential Honors Directed Design

- Software Engineering I & II
- Artificial Intelligence
- Information Visualization and Virtualization
- Computer Graphics

## **Projects**

SailingVR | Virtual Reality Sailing Simulator | Unreal Engine 5, Virtual Reality, Senior Design

Jan. 2024 - Present

Dearborn, Michigan

Concentration: Game Design

Sept. 2020 - Dec. 2024

- Utilizes virtual reality to simulate a sailing environment, similar to that of the Caribbeans, using Unreal Engine's OpenXR and water plug-in
- Collaborated with 2 teammates to develop a virtual sailboat, implementing full functionality and physics, using Unreal Engine's blueprint map system and OpenXR plugin
- Uses Agile Software Development to collaborate with client and teammates, serving as Scrum Leader to develop leadership skills

EndureVR | Virtual Reality Simulation Therapy | Unity, Virtual Reality, 3D, Simulation, Solo Project

- Utilizes virtual reality to simulate environments that trigger specific phobias, fostering a platform for users to confront and overcome their deepest fears, this led to researching the psychological effects of phobias on people
- Dedicated time to acquiring proficiency in 3D map Unity design and orchestrating virtual reality events, using Unity's XR Interaction Toolkit
- Collaborated up with a game design professor and psychology peers to brainstorm and enhance immersive experiences

Brood Mother | Bullethell Tower Defense Game | Unity, 2D, Developers of Dearborn Game

Jan. 2021

- Led a 15-member team as the Principal Game Designer, employing Agile Software Development
- Structured and guided a 15-member team into specialized sub-teams aligned with strengths, learning effective leadership
- Conducted weekly sessions to establish objectives, overseeing each sub-team to ensure effective communication and coordination while using Agile Software Development

#### Experience

#### AccelerateKID, Kids+Entrepreneurship+Tech

April. 2024 – Present

Technology Education Impact Instructor

Novi, Michigan

- Design interactive technology education curriculum that would be for different age groups and skill levels ranging from elementary school students to high schoolers
- Technology Taught: UnityVR, Java, Python, 3D Printing, Minecraft Studio, Scratch, and Roblox Studio

#### Technical Skills

Languages: Python, Java, C++, C# HTML/CSS, Rust, JavaScript, SQL

Technologies/Frameworks: Unity, Unreal Engine 5, VS Code 2022, SteamVR, Blender, React, PyGames, Android Studio Highlighted Skills: Project and Task Management, Strong Documentation, Technical Game Design, Virtual Reality Development, Game and Scripts Debugging, Collaboration

# Leadership / Extracurricular / Awards

## Developer of Dearborn

Winter 2020 - Present

Founder & Community Manager & Adviser & Member

University of Michigan-Dearborn

• Co-founded the Video Game Development Club at the University of Michigan-Dearborn, assuming the role of Community Manager. Orchestrated and executed six events throughout the semester to foster community engagement and promote the club's objectives

# Senior Design Project Award

April 2024

CECS Department Award

University Michigan-Dearborn

\* Winner of the Senior Design Competition at the University of Michigan-Dearborn, where all senior design teams compete in front of professional engineer judges in a poster format