Student: Logan Forester

Degree: Computer Science

Advisor: Professor Michael O'Neill

Graduation: Spring 2026

Problem Statement and Description:

The ideal vision for my Senior Project is to recreate the classic game Pong by adding some modern twists to enhance gameplay and visual appeal. The ideal outcome of this would be to create a new version of Pong that will retain the nostalgic features of the original game while allowing for exciting new twists that everyone will find fresh and fun. The traditional version of the game, The traditional version of Pong, while timeless, may lack the dynamism and variety expected by modern gamers. Its simplicity, while iconic, can lead to repetitive gameplay experiences, limiting long-term engagement. Therefore, the game's original design presents a problem in meeting the evolving expectations and demands of today's gaming audience. Addressing this issue ensures that Pong remains an enjoyable experience for the veteran Pong players as well as the modern audience of today.

To address these concerns, I plan to modernize the classic Pong experience by adding new gameplay features and modes to the original foundation of the game. With this modernized version of Pong I aim to spark new interest in the new generation of gamers while keeping the nostalgic feelings that the older players loved about the game. The addition of the new game modes and customizable features allow for more engagement and replayability. Furthermore, introducing elements like power-ups and possible hidden features adds excitement and

unpredictability to the gameplay experience. By infusing Pong with a modern twist, the hope is to give the retro hero game a new life that resonates with the longtime fans as well as the new age gamers.

Language: Python

Libraries: Pygames

Personal Motivation:

I have always had a love for video games which has played a big part in my decision to undertake recreating Pong as my Senior Project. Since childhood, I've been captivated by the creativity and immersion that gaming offers. Pong, as one of the pioneering games in the gaming world, holds a special place in my heart. Its simplicity and elegance are timeless, yet I recognize the need to evolve and adapt to meet the expectations of today's gaming community. By modernizing Pong, I aim to combine my love for classic gaming with my desire to innovate and push boundaries. Introducing new gameplay features and modes not only rejuvenates the experience for seasoned players but also invites a new generation of gamers to appreciate the game's legacy in a contemporary context. The prospect of infusing Pong with exciting twists, customizable elements, and unpredictable dynamics excites me, as it represents a fusion of nostalgia and innovation.