# Allie Lavacek

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## **EDUCATION**

# University of Michigan - Ann Arbor

Bachelor of Science, Computer Science

# August 2020 - December 2024

Current Overall GPA 3.77

# RELEVANT COURSEWORK

- ❖ Introduction to Game Development
- ❖ Data Structures and Algorithms
- **❖** UI Development

- Extended Reality and Society
- Foundations of Computer Science
- **❖** Web Systems

- ❖ Game Engines Architecture (2024)
- ❖ Computer Organization
- Computer Vision

## **PROJECTS & EXPERIENCE**

#### Kyrie Studios, Remote/Gameplay Programming Intern

#### November 2023-Present 2024

- ♦ In Unreal Engine 5, worked with a team of 25 others to create Project Chaos, a thrilling party-style battle royale
- Implemented unique NPC and animal behaviors, knocking rolling barrels, cannons, and explosions

#### Visteon Corporation, Belleville, MI/Product Development Intern

#### May 2023-August 2023

- \* Explored the benefits of using Unreal Game Engine for automotive HMI through a Proof of Concept project
- Collaborated with a cross-functional team in the Godot Game Engine to implement features and optimize performance in order to investigate potential options to enhance the user experience

#### Wolverine Soft Studios, Ann Arbor, MI/Programming Lead

April 2023-April 2024

- ❖ Maintained Git Repository and handled merge conflicts that were encountered
- ❖ Oversaw a team of 8-13 students. Held weekly meetings, office hours, and planned meetings with an industry advisor
- ❖ From August 2023-April 2024, developed an RPG in the Unity Game Engine with a team of 40 students
- \* Created the prototype of the game and the architecture of all basic functionality: a battle system similar to that found in the popular title *Undertale*, input and movement scripts, a dialogue system, and a quest system
- ❖ From April 2023-August 2023, collaborated with a team of 30 students to create a captivating "2.5D" game in the Unity Game Engine which emulated the gameplay mechanic of the popular title *Nova Drift*
- Created the prototype of the game and the architecture of all basic functionality: an encounter system, input and movement scripts, and enemy controller and weapon abstract classes to build on

# Project Drift, Ann Arbor, MI/Programmer

# January 2023—April 2023

- Through Wolverine Soft Studio, collaborated with a team of 40 students to develop a 2D game in the Unity Game Engine as a case study of the renowned title *Hyper Light Drifter*
- ♦ Member of the level squad, created the encounter system, cutscene manager, and aided with art integration

# Granny's Day Off, Ann Arbor, MI/Design Lead

# October 2022—December 2023

- Team of 5 developers and a musician, created a 3D, 1v1 3rd person shooter in the Unity Game Engine
- \* Responsible for the initial designs and concept, NPC and Police's movement behavior, post-processing, art and animation integration. Created the Player, NPC, and Player House 3D models in Blender

# 48 HOUR GAME JAMS / TEAMS OF 3-5

# Follow the Flock/Wolverine Soft's Shammy Jam/Awarded Best Polish & Aesthetics

**March 2022** 

\* Responsible for character sprites, background images, and musical track

#### BEE-01/Wolverine Soft's Turkey Jam

November 2022

❖ Implemented encounter system, enemy controller scripts, health scripts, and damage scripts

# Getting to the Root of It/Global Game Jam

February 2023

\* Responsible for all art integration, camera movement, and health scripts