# WILLIAM LACALLE

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## **EDUCATION**

**MAY 2021** 

### **BS COMPUTER SCIENCE, SOUTHERN ARKANSAS UNIVERSITY**

GPA: 3.95, Graduated with Honors College

### WORK EXPERIENCE

### CYCLE SQUID STUDIOS, MAGNOLIA INTERACTIVE

Rummage | 2021-PRESENT:

- Awarded First in Indie/Professional category at Computer Science & Gaming Conference (CSGC) 2022.
- Working as a programming contractor on a game where the player customizes his main tool to explore the game world and solve puzzles.
- Worked on the procedural crafting system, save system, quest system, and player controller.
- Tools used: C#, Unity, Git, Shader Graph, HLSL

## **STUDENT COLLEGE WORKER, SOUTHERN ARKANSAS UNIVERSITY**

Tutor | 2020-2021:

• Helped students with their Computer Science classes.

Lab Assistant | 2019:

• Aided students in their Computer Science lab work.

#### FRONT END WORKER, WALMART

Cashier | 2018-2019:

Gained experience in customer service and retail.

# **PROJECTS**

# **GAME PROGRAMMING, SOUTHERN ARKANSAS UNIVERSITY**

Bomb Voyage [Available on Steam] | Team of 20 | 2020-2021:

- Took the role of Lead Programmer for this game where 4 players must outrun and outwit each other and hold onto an object for the longest amount of time.
- Worked on a character controller for both the player and A.I. using SOLID principles.
- Tools used: C#, Unity, Git

Mote Engine Raycaster | Solo | 2020:

- Worked with an open-source game engine to make a map editor and Raycaster.
- Tools used: Mote Game Engine, Lua, Git

Yokai Rush VR | Team of 15 | 2019:

- Worked on integrating Unity VR libraries to make a game where the player will have to grab and throw waves of enemies to survive.
- Worked on the player controller, game manager, the wave spawning system, and A.I. functionality.
- Tools used: C#, Unity, Git

#### **GAME PROGRAMMER, GAME JAMS**

Snyatcher | Global Game Jam | Team of 8 | 2021:

- Worked on a game where the player's cats have escaped across town, and they have to track them down and snatch them.
- Worked on the cat A.I. with how they interacted with the player and each other [non-combative].
- Worked on sound manager and added juice to make the game more appealing.
- Tools used: C#, Unity, Git

# WINDOWS APP DEVELOPMENT, SOUTHERN ARKANSAS UNIVERSITY

Chat Room App | Solo | 2020:

- Developed a console chat room app that worked across the network.
- Tools used: C++, Winsock API, Git

# A.I. PROGRAMMING, SOUTHERN ARKANSAS UNIVERSITY

Genetic Algorithm Research and Implementation | Solo | 2020:

- Tasked with researching Genetic Algorithms and creating an implementation in Unity.
- Created a physics-based obstacle course and a population of A.I. entities that mutate through generations to complete said obstacle course.
- Tools used: C#, Unity, Git

# STUDENT RESEARCH INTERNSHIP, SOUTHERN ARKANSAS UNIVERSITY

NASA Internship | Team of 3 | 2019:

• Worked with 2 fellow students under the guidance of the department chair to research a published math paper about a data mining algorithm and translate it to C++ code to perform analysis on a stream of data gained from satellites.

# **SKILLS**

Windows App Development, Unity, Shader Graph, HLSL, Java, C#, C++, Python, PHP, MySQL, HTML5, CSS3, Lua, OpenGL, Git, Data Structures, Algorithms, Networking