

WILLIAM LACALLE

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EDUCATION

MAY 2021

BS COMPUTER SCIENCE, SOUTHERN ARKANSAS UNIVERSITY

GPA: 3.95, Graduated with Honors College

RELEVANT COURSES

Computer Science I, Computer Science II, Game Design Management, Game Development, Data Structures & Algorithms, Computer Architecture, Fundamental of Game Programming I, Fundamental of Game Programming II, Game Studio Workshop, High Level Language, Assembler & Machine Language, Artificial Intelligence, Operating Systems, Web Programming, Advanced UNIX/LINUX, Software Engineering, Special Topics: Software Engineering for Native Development, Computer Graphics, Linear Algebra

SCHOOL PROJECTS

GAME PROGRAMMING, SAU

Bomb Voyage [Available on Steam] | 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 | 2020:

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

Yokai Rush VR | 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

WINDOWS APP DEVELOPMENT, SAU

Chat Room App | 2020:

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

A.I. PROGRAMMING, SAU

Genetic Algorithm Research and Implementation | 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, SAU

NASA Internship | 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.

WORK EXPERIENCE

CYCLE SQUID STUDIOS, MAGNOLIA INTERACTIVE

Rummage | 2021-PRESENT:

- Work 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, SAU

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.

EXTRA CURRICULAR ACTIVITIES

GAME PROGRAMMER, GAME JAMS

Snyatcher | Global Game Jam | 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

SKILLS

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