

Nic Hindes

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Software Engineer

303-475-9907

nichindes.com

Skills

Datastructures • Algorithms • State Machines • Unity

C • C++ • Collaboration • Version Control • Unicycling

Education

DigiPen Institute of Technology - BS in Computer Science and Game Design

April 2024

Academic Projects

Software Engineer, A* Pathfinding (C++ Custom Engine)

March 2024

- Implemented A* pathfinding for a tile based game with changeable heuristics
- Optimized run time by precomputing neighbor nodes and trimming node size
- Provided additional customizability with optional post processing effects for final path

Gameplay Programmer, *Basil and the Isles of Spice* (Unity)

September 2022 – December 2023

- Collaborated on various mini-games and character interactions to add diversity and vibrance to the game
- Implemented dynamic audio emitters and 30+ audio assets to enhance user experience and overall game feel
- Built a custom player controller that uses physics and acceleration for precise and natural platforming/exploration

Gameplay Programmer, *Arali* (C++ Custom Engine)

September 2021 - April 2022

- Created a custom player controller using a state machine to alter the player's state according to user inputs
- Simulated intelligent enemies and NPCs using a custom finite state machine to control NPC behavior
- Implemented collision into the custom engine using the bounding box and circle-circle techniques
- Collaborated with artists and sound designer to implement all animations and sound effects to enhance user experience and bring the world to life

Professional Experience

Instructor, Open World at DigiPen

June - August 2024

- Taught various weeklong courses to kids aged 9 to 13 in computer science and robotics
- Developed curriculum for future classes taught by Open World

Teacher's Assistant for Intro to Game Development, WANIC at DigiPen

June - July 2023

- Coached 30+ high school students in game development including debugging techniques, coding best practices, game balance, and art and animation

Assistant to the Head of Facilities, Evergreen Country Day School

June - August 2019 - 2022

- Responsible for maintaining and improving the school and its grounds as well as preparing the school for the coming school year