

Abhay More

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EDUCATION

Parvatibai Genba Moze College of Engineering

Bachelor of Engineering in Computer Engineering

Pune, MH

Aug. 2019 – July 2023

Kendriya Vidyalaya No. 2 AFS PUNE

HSC - Physics, Chemistry, Mathematics, Computer Science - 79.8%

Pune, MH

April 2017 – March 2019

Kendriya Vidyalaya No. 2 AFS PUNE

SSC - 8.4 CGPA

Pune, MH

April 2007 – March 2017

PROJECTS

AMMPED - UP : A Retro Style Game | | C++, SFML, Mongocxx, TGUI

- Final Year College Project, Bomberman clone made with C++ and SFML for graphics and MongoDB's C++ library mongocxx for online database accessibility for login info and highscore.
- Used Login Functionality with std::regex for validation.
- Implemented Design Patterns like State Stack and Singleton Classes.
- Implemented autonomous Enemies having random movement behaviour
- Implemented Asset management system to handle textures, sound effects, music.

Doodle Jump Clone | | C++, SFML

- Made use of design patterns like State Stack Pattern to handle transition of various game states.
- Platforms are randomly spawned.
- Score is calculated based on the distance travelled.

Boids Simulation | | C++, SFML, TGUI

- Simulated the motion of flocking of Birds as per the creator Craig Reynolds.
- The algorithm consists of three simple steering behaviors Separation, Alignment and Cohesion.
- 200 Boids/Objects are managed by the algorithm.
- A crude object detection is also implemented by using the separation behaviour rule.

More Game Of Life | | C++, SFML

- The traditional Conway's Game of Life abiding by the THREE rules.
 - * Any live cell with two or three live neighbours survives.
 - * Any dead cell with three live neighbours becomes a live cell.
 - * All other live cells die in the next generation. Similarly, all other dead cells stay dead.
- The "MORE" in this is UI for different controls and the selection of pre-loaded patterns from the pattern matrix.
PS : The name "MORE" comes from my Last Name. ;)
- Pre-loading of patterns is done using file system, patterns.ini file is use to store patterns in binary format.

2D Ray Casting Visibility | | C++, SFML

- 2D visibility/shadow effect, useful to calculate which areas are visible from a given point in a top down approach.
- Algorithm generates a light map by calculating the illuminated areas from multiple light sources.
- Lines connect a source point to vertex ends and are extended. Triangles are formed from adjacent lines, resulting in a concave shape that represents a 2D Map.

2D Ray Casting | | C++, SFML

- Method to find visible regions in a game world.
- This technique can be used to create a 3D perspective with a 2D map.

VOLUNTEER EXPERIENCE

BOLDNET, Maharashtra, India

August 2019 - Present

Chapter President

Apr 2022 - Jun 2022

- Led youth-focused events in Personality and Leadership, Employability, and Career Development.
- Ensured flawless execution of events/activities through collaboration with VP, Secretary, and 10+ coordinators.
- Oversaw goal setting, weekly meetings, and regular performance evaluations.

Chapter Vice President

Oct 2020 - Dec 2020

- Maintained communication with youth, coordinators to ensure continuity of their relationship, provided assistance
- Assisted and supported President wherever required and helped in achieving the Chapter goals.

Chapter Secretary

Oct 2021 - Dec 2021

- Worked on back-end. Tracked, recorded and maintained the data regarding overall participation.
- Helped the President with statistical analysis and achieving the Chapter goals.

TECHNICAL SKILLS

Languages: C++, GDScript, C, Python, Bash

Developer Tools: Git/Github, Visual Studio, VS Code, Piskelsprite, Blender, Tiled, CMake

Libraries: SFML, TGUI, mongocxx(MongoDB C++ Driver), nlohmann/json