

Projects & Associations

Advanced Algorithms in Rust

[THEALGORITHMS/RUST](#)

2022

[Github](#)

- Implement advanced graph algorithms such as centroid decomposition and max-flow.
- Implement various cryptographic algorithms including Salsa20 and HMAC.
- Improve and optimize the implementation of various algorithms like SHA256 and DSU.
- Various other improvements and implementation.

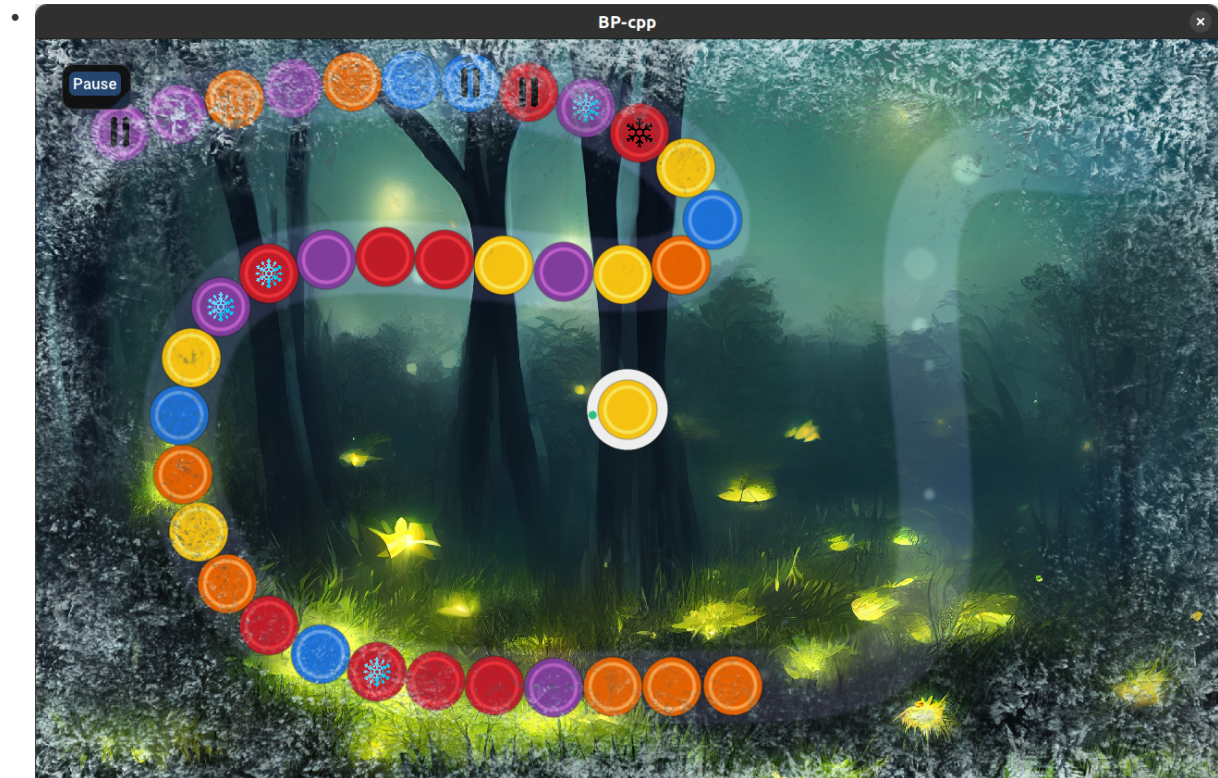
Jungle Marble Blast Clone

[ER888KH/BP-CPP](#)

2023

[Github](#)

- This was the project for our basic-programming course.
- Implemented using SDL and Dear ImGui libraries in C++.



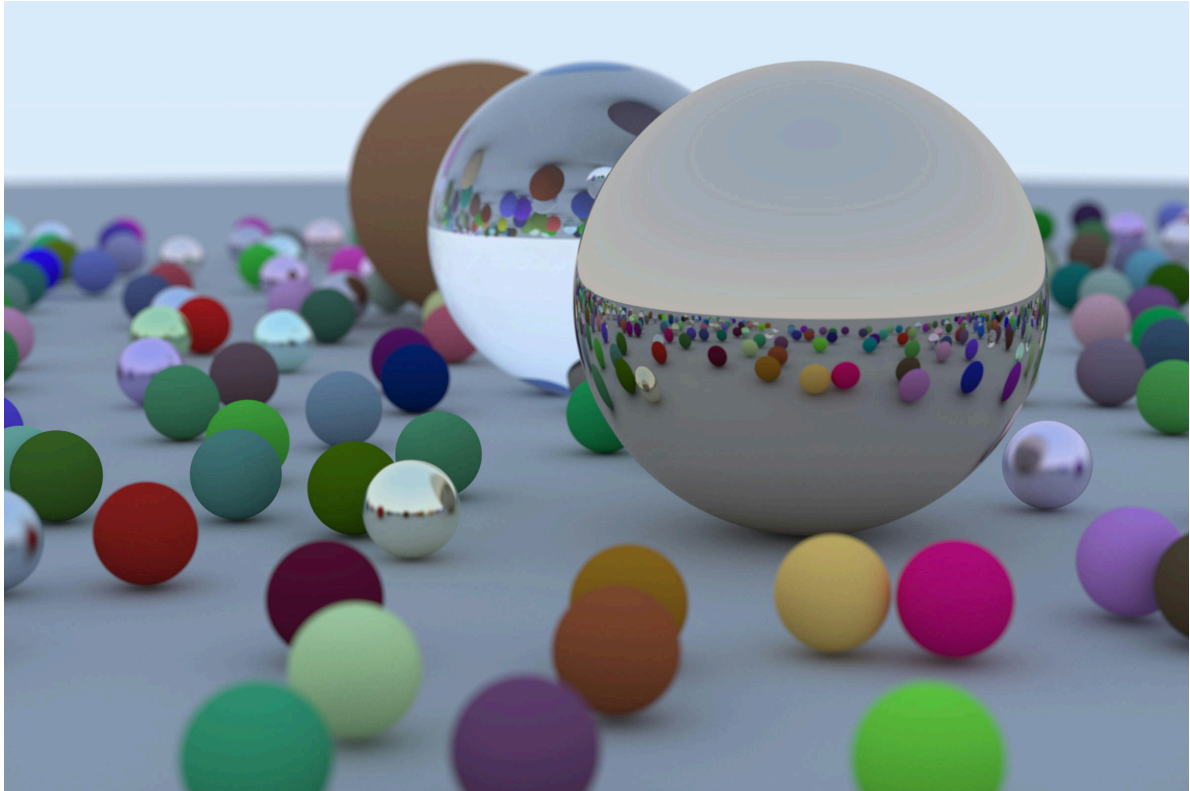
Path Tracing Tay-Tracer

[ER888KH/PTRT](#)

2022

[Github](#)

- A simple path tracer implemented in pure C++.
- Using various statistical and SIMD tricks to improve performance
- Parallel processing implemented using OpenMP



SSH VPN with User Management

[ER888KH/SSH-LIBERTY-BRIDGE](#)

2023

Github

- Implemented in go with the user management componenet written in python.
- Has been used successfully for bypassing GFW restrictions in Iran and bringing internet freedom to the citizens.
- Integrated in hiddify's excellent GFW bypass solution.
- This has been implemented with great care regarding its security and performance and uses redis as its database