

Projects & Associations

Advanced Algorithms in Rust

2022

[THEALGORITHMS/RUST](#)

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.
- Many other big and small improvements and implementation.

SSH Anti-Censorship Tool

2023

[SSH-LIBERTY-BRIDGE](#)

Github

- Implemented in go with the user management component 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.

Path Tracing Ray-Tracer

2022

[PTRT](#)

Github

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

Jungle Marble Blast Game Clone

2023

[BP-CPP](#)

Github

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