

Levels in realtime stealth games are often tightly interconnected structures with unique challenges and lock & key puzzles. However, there are no well known instances that attempt to generate these levels procedurally. We implement a small generic 3D realtime stealth game and a level generation algorithm for it. Our game is composed of mechanics commonly found in most stealth centric games. Our generated levels resemble levels from modern stealth games in complexity and interconnectedness. They contain unique challenges for the player. Some generated level sections have shortcomings, but are always playable. In summary, we believe our algorithm succeeded as a proof of concept and can be used in actual stealth games with additional content. Moreover, we contributed a concrete implementation of the cyclic generation algorithm, where the original source is vague on implementation details. Our algorithm can be used to generate levels for stealth games, RPGs, and other genres that make use of lock & key puzzles.