

# SAMUEL SCHIMMEL

## GAMEPLAY PROGRAMMER

samuelschimmel.com

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## SKILLS

C, C++, C#, Unreal, Unity, MySQL, Node.js, OpenGL, Visual Studio, ReSharper, Perforce, Git, Linux, GCC, GNU Make, Doxygen, Valgrind, Confluence

## EDUCATION

### **Bachelor of Science**

#### **in Computer Science in Real-Time Interactive Simulation**

DigiPen Institute of Technology, 2020

Minor in Game Design

### **Bachelor of Arts in Political Science**

Western Washington University, 2014

## EXPERIENCE

### **Teaching Assistant**, DigiPen Institute of Technology

GAM 300 (Project III), GAM 350 (Project III), GAT 240 (Technology for Designers), GAT 250 (2D Game Design I), GAT 260 (User Experience Design I), CS 116 (Introduction to Computer Technology and Programming), CS 175 (Scripting Languages), CS 176 (Advanced Scripting), CS 185 (C++ for Designers), CS 260 (Computer Networks I: Interprocess Communication), CS 280 (Data Structures)

## PROJECTS

### **Technical Director**, *Perdition*, 2017 to 2018

#### **2019 DigiPen PAX Arcade Booth Senior Game Selection**

3D, systems-driven, emergent FPS developed in Unreal using C++

Media and code samples at [samuelschimmel.com/unreal](http://samuelschimmel.com/unreal)

Implemented player, NPC, shared player/NPC base class, AI formations, AI behavior trees, AI aiming including target velocity and bullet drop compensation, AI vision and hearing, AI detection, stealth mechanics including agent illumination calculation, behavior tree-compatible scripting nodes, damage system, inventory system, weapons, projectiles, melee attack, melee takedown, lock-on targeting, rifle scope, destructible armor, fire propagation, dash mechanic, obstacle climbing, object interaction, ladders, doors, quest system, RPG mechanics, checkpoints and saving, enemy encounter system, asset loading with caching, options menu backend, player modeling, dynamic difficulty, dynamic tutorials, weighted random item spawning, worldspace UI, dynamic multicast delegate Blueprint interface

### **Technical Director**, *Being Evelyn*, 2016 to 2017

2D, narrative-driven, social stealth and hacking game developed in Unity

Media and code samples at [samuelschimmel.com/unity](http://samuelschimmel.com/unity)

Implemented player, NPC, shared player/NPC base class, AI, A\* pathfinding, turn system, branching dialogue system, diegetic menus, HUD, UI animation, camera animation, adaptive music system