# SAMUEL FREEMAN

# Gameplay engineering and design

github.com/Wildlight03 | sam-freeman.com

Motivated Unreal Engine 5 C++ / blueprint engineer with a passion for creating immersive game worlds and innovative gameplay mechanics. Seeking to leverage expertise in UE5 to contribute to a dynamic game development team.

# Skills

#### **Technical**

- Object-Oriented Programming
- Gameplay Programming
- Procedural Generation
- Al Programming
- Physics and Animation Systems
- 3D Math, Data Structures and Algorithms
- Networking/Multiplayer

### Experience

#### VoidLab

#### 2024 to Present | Revenue Share Project

- · Collaborated with a multidisciplinary team to design and implement core gameplay elements.
- Developed gameplay systems, including Al behavior and spawning, player combat, movement, and interaction systems, multiplayer replication, and plugin integration, utilizing C++ and Unreal Engine 5.
- Documented technical processes to ensure clear communication across the team and facilitate future development and troubleshooting.
- Participated in regular team meetings to align project goals, provide technical insights, and ensure timely delivery of features within set milestones.
- Contributed to an iterative development process, refining gameplay systems based on feedback and playtesting to enhance user experience.

# Projects

### Gnomes Vs Knights

#### Independent | 2024 | Blueprint | C++

- · Essential tower defense gameplay systems and logic
- Al systems and managment
- UI desgin and Integration
- Player abilities and tower progression

### TerraTech

#### Independent | 2024 | Blueprint | C++

- Procedural runtime terrain generation
- Procedural runtime biome generation
- Unreal 5 Material and PCG integration

### Sword Of Chad

#### Independent | 2023 | Blueprint | C++

- · Medieval style directional melee and ranged combat sytem
- · Player crafting, inventory, equipment and building systems
- Al combat and player managed village systems
- UI  $\$  menu design and integration
- · Survival game mechanics and character progression
- Multiplyer Replication

#### **Languages**

• C++

• Unreal Engine Blueprint

#### <u>Tools</u>

Unreal Engine

- Github
- Agile | Jira
- Visual Studio
- Trello

**Gameplay Engineer** 

**Tower Defense** 

**Procedural Terrain generation** 

**3rd Person Survival Craft**