

# Seth Burchfield

## Software Engineer

See my portfolio at [sburchfield.com](https://sburchfield.com)

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### Motivated programmer with a passion for creating great games

- Bachelor's degree in Software Engineering from Auburn University (2020)
- Highly knowledgeable with Unity and Unreal Engine 5
- Skilled in C++ and C#
- Indie developer with experience in many facets of game development

### 5BY5 Studios

Aug. 2022 - Aug. 2024

#### Last Expedition - Generalist Engineer (Unreal 5)

- Developed and iterated upon AI behaviors for several different types of creatures
- Developed a projectile system that allowed for responsive player input in a high lag environment
- Optimized the game to support up to 100 creatures and 16 players connected to a low bandwidth server
- Implemented an animation syncing system that allowed two networked players to animate together

### Marching Cube

Aug. 2020 - Aug. 2022

#### Universal's Villain Con Minion Blast - Generalist Engineer (Unreal 5)

- Created an AI task manager system that delegates tasks to any AI actor based on a priority value
- Built a destruction system that allows for dynamic respawning of designer created structures
- Constructed a scene manager system that dynamically controls a min/max value of any actor in the scene
- Produced an AI actor that moves along a gravity-defying track and dynamically avoids other AI and player-created holes in the ground

#### *Inertia Project* - Generalist Engineer (Unity)

- Ported an outdated mobile game to modern version of Unity
- Updated UI to support high resolution and gamepad
- Optimized game to run on Switch with updated art assets

### Indie Developer

Sep. 2019 - Present

#### CYBERHUNK - Solo Developer

- Fully developed and released solo indie game on Steam
- Developed robust first-person weapon system
- Integrated Steam online multiplayer with up to 4 players
- Programmed a monster closet plugin that dynamically spawns creatures outside of a player's view

#### Planet Pin - Solo Developer

- Implemented an upgrade system that allows for runtime modification of player stats
- Created a track system that dynamically expands during gameplay
- Developed a robust physics-based movement system
- Designed a shop system that introduces items based on difficulty