

# Gavin Roye

## Systems Designer

Game development student at SCAD specializing in systems design and technical implementation. Passionate about creating engaging gameplay systems through iterative design and prototyping in Unreal Engine 5 and Unity.

## Current Projects

### Third-Person Spell Casting Game | GAME 405 Course Project | Winter 2025

*Tools: Unreal Engine 5, Blueprint Visual Scripting*

- Programmed complete third-person character controller, camera system, and responsive movement mechanics
- Built modular spell casting system with multiple spell types, cooldowns, targeting, and projectile physics
- Developed AI behavior for 2 enemy types using Behavior Trees with patrol, chase, and combat states
- Integrated third-party rigged characters and animations into functional combat prototype

### Drone Combat System | Systems Design Course Project | Winter 2026

*Tools: Unreal Engine 5, Blueprint/C#, Team Collaboration*

- Designed and programmed AI drone system with autonomous movement, pathfinding, and bomber attack behaviors
- Integrated team-created art assets and VFX while balancing combat mechanics for player engagement
- Led gameplay systems design including enemy behavior patterns, difficulty tuning, and encounter pacing

## Personal Info

### Address

Savannah, GA

### Email

garoye20@student.scad.edu

### Personal Site

TBD

## Social Media

[LinkedIn](#)

[Bluesky](#)

## Technical Skills

- Unreal Engine Blueprinting
- Unity
- SCRUM
- git/perforce
- Gameplay systems

## Education

2022-2026- Bachelor of Fine Arts in Interactive Design and Game Development