

# George Carter

16 Years Engineering Experience · Marlow, OK

Studio Email

LinkedIn

Itch.io

## PROFILE

Game Developer specializing in gameplay programming, AI systems, and UI/UX architecture with experience across Unity (C#) and Unreal Engine (C++/Blueprints). Backed by 16 years of professional Mechanical Engineering experience. Adept at building core player systems, enemy behaviors, environmental mechanics, and resource/progression frameworks.

## GAME DEVELOPMENT · ACADEMIC



### Shadows of Beginnings

APR 2026 - PRESENT

Team Nebula Interactive · Full Sail University

Action Adventure RPG

Unreal Engine

UI/UX & AI Lead

- ▶ Designed and implemented HUD and UI systems including menus, quest logs, and interaction displays
- ▶ Designed and implemented enemy AI behaviors for escalating combat encounters
- ▶ Created horror event logic tied to exploration, tension, and player decision-making
- ▶ Implemented 'monster house' trigger systems for ambushes and scripted encounters
- ▶ Developed gameplay and systems using Unreal Engine (C++ & Blueprints)

## SKILLS

### GAME ENGINES

Unreal Engine

Unity

C++

Blueprints

C#

### LANGUAGES & TOOLS

C++

C#

Visual Studio

GitHub

Perforce

Vulkan

### GAME SYSTEMS

AI Behavior Trees

State Machines

UI/UX

Physics

Save/Load

HUD Systems

Menu Flows

### PRODUCTIVITY

Trello

Discord

GitHub

### ENGINEERING SOFTWARE

SolidWorks

AutoCAD

Creo

RISA

ProNest 2023

## EDUCATION

### B.S. Game Development

Full Sail University · Winter Park, FL

JUN 2026

### B.S. Mechanical Engineering

Cameron University · Lawton, OK

MAY 2008

### A.A.S. Applied Science

## Clockwork Horrors

JUN 2025

Team Clockwork · Full Sail University

First Person Shooter

Unity (C#)

Gameplay & AI Systems

- ▶ Implemented core FPS player systems: movement, crouch/hide, shooting, and pause functionality
- ▶ Created enemy AI for Clockwork Rifleman and Detonator Wraith with multiple difficulty tiers
- ▶ Designed environmental hazards: frozen terrain, snowy surfaces, collapsing structures
- ▶ Implemented XP-based progression and energy cell resource systems

## Dr. Malware

OCT 2025

Green Team · Full Sail University

Puzzle Game

C++ / Vulkan

Core Gameplay Systems

- ▶ Implemented core virus mechanics including placement, color assignment, and visual/audio feedback
- ▶ Built combo detection system supporting match-four logic and cascading reactions
- ▶ Finalized save/load system with reliable state persistence and error handling

## ENGINEERING EXPERIENCE

### Chief Engineer

Barrett Trailers

SEP 2021 - PRESENT · Purcell, OK

- ▶ Designed and modified parts across manufacturing, trailer, and stock trailer equipment departments
- ▶ Built a suite of custom SolidWorks add-ins to automate pipe, fitting, and tank design

### Independent Engineer / Consultant

Evolve / Tesla

APR 2020 - SEP 2021 · Remote

- ▶ Delivered engineering solutions that improved safety, reduced costs, and streamlined assembly

Cameron University · Lawton, OK

MAY 2006

## CERTIFICATIONS

SolidWorks Certified Professional - Core

SolidWorks CP - Advanced Sheet Metal

SolidWorks CP - Advanced Weldments

SolidWorks PDM Certification

## Engineering Manager

Urban Farmhouse Designs

JAN 2015 – SEP 2020 · Oklahoma City, OK

- Led engineering department producing drawings and parts for all company product lines

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## Mechanical Engineering Manager

Titan Tanks & Vessels

MAR 2009 – JAN 2015 · Elmore City, OK

- Managed designers and drafters; oversaw ASME code and non-code tank and vessel design

### SOLIDWORKS AUTOMATION SUITE

Custom SolidWorks add-ins built on the SolidWorks API (C#) to automate repetitive CAD work – generating parametric pipe, fitting, and tank geometry plus drawings, BOMs, and metadata on demand. 18 tools across 4 categories.

#### PIPE & FITTING BUILDERS

Flange Filament-Wound Socket

Concentric Reducer Builder

Bell & Spigot Builder

Elbow (Plain End)

Flange Builder

Single Flange

Single Pipe

#### ASSEMBLIES

Full Pipe Assembly

Full Pipe Pro Assembly

Full Pipe Weldment Assembly

Pipe Assembly

#### DRAWINGS, BOM & DATA

Drawing & BOM Generator

BOM Creator

Table Creator

Properties Creator

Data / Extract & Get Information

#### TANK TOOLS

Tank App

Tank Tester