# **Robert Casey Lafferty**

(913) 980 - 0216 robert.casey.lafferty@gmail.com github.com/rclafferty rclafferty.github.io

Through my engineering work with proprietary tech, I bring designers' gameplay creations to life.

#### **Game Credits**

AAA: Call of Duty: Black Ops 6 (Proprietary Engine)	2024
AAA: Call of Duty: Modern Warfare III (Proprietary Engine)	2023
Indie: Social Sidekick (Unity Engine)	2023

#### **Computer Skills**

Languages	C++, C#, Java, C, Python, Lua, MySQL, SQL Server, PHP, HTML5, CSS3, NodeJS
<b>Developer Tools</b>	Git, Visual Studio 2022, VS Code, PyCharm, Spyder, R Studio, Perforce, SVN
Game Dev Tools	Unreal Engine 4/5, Unity Engine, Audacity, Mixamo, Adobe Photoshop

#### **Professional Work Experience**

#### **AI Engineer** (Unreal Engine 5 C++/Blueprint)

March 2024 - Present

Deviant Games, Remote

- Prototyped new AI mechanics, behaviors, and components to enhance in-game mechanics and player experiences
- Initiated a code review process for all engineers to receive feedback and share knowledge across teams

# Gameplay Engineer - Call of Duty (C++, Python, Proprietary Tech)

Oct 2022 - Sept 2023

Treyarch, Playa Vista, CA

- Engineered 22 gameplay mechanics to empower players' experience in the proprietary Call of Duty engine
- Optimized workflow for my team and collaborators by centralizing information about a proprietary tool

# Software Engineer – Level Up U (C++, Unreal Engine 4, Proprietary Tech)

July 2022 - Oct 2022

Activision Blizzard, Remote

- Learned AAA game development tools and roles in 13-week internal bootcamp
- Created and presented a custom-designed game mode using the proprietary Call of Duty engine

# Software Engineer II – Game Server & Systems (C#, C++, MS SQL Server)

Dec 2021 – July 2022

- AGS, Duluth, GA
  Designed a brand new Windows service to assist in legacy support for older servers
  - Enhanced OA's workflow by improving the UI and back-end functionality for existing software suites

#### Software Engineer – Tomahawk Weapons Control System (C++)

March 2021 - Sept 2021

Naval Surface Warfare Center, Dahlgren, VA

- Implemented UI and back-end fixes to mission-critical C++ code for government weapons systems
- Streamlined new hire onboarding documentation and exercises to improve future new hire experiences

## **Game Dev Projects**

# **Unreal Engine Sandbox** (Unreal Engine 5 C++/Blueprint) – Side Project (<u>Link</u>)

Sept 2023 - Present

- 3D third-person sandbox project used to explore game ideas, AI, player controls, VFX, animation, and cinematics
- Designed AI NPCs to patrol an area and detect the player using sight, hearing, and prediction perception types

## Wrath of Raoden (Unity C#) – Side Project (Link)

Dec 2020 - Feb 2023

- 2D roguelike dungeon crawler where the player must conquer randomized dungeons to save the world
- Managed a team of 3-6 developers through design, development, and testing with intent to publish

#### **Education**

# University of Nebraska-Lincoln, Lincoln, NE

Dec 2020

Master of Science in Computer Science CS GPA: 3.39

### Kansas State University, Manhattan, KS

May 2017

Bachelor of Science in Computer Science Minor: Music CS GPA: 3.26

# **Honors & Activities**

Co-Founder, President – UNL Game Development Club Eagle Scout

Aug 2018 – Dec 2019