# **Douglas Potesta**

## **Qualifications**

Extensive knowledge and experience with game programming, project structuring and design implementation. Cultured in the various toolsets in Unity and Unreal Engine via experience in professional development settings.

Passion for learning, researching and engineering game development techniques, tools, and team solutions.

Experience in agile environment as a lead developer, maintaining tasks and documentation.

#### **Technology Summary**

Languages: C++, C, HLSL, Nvidia CG, C#, Java, Python, Html, CSS, Blueprint

Software: Unreal Engine 4 and 5, Unity, MSVS, 3ds Max, Blender, Photoshop, Premier, and Dreamweaver

## Work History

#### Armature / Meta: June 2021 – Current

Engineer II at Armature / Studio Developer IC4 at Meta

Create and prototype gameplay features for Resident Evil 4 VR on Quest 2. Maintain, renovate, and fix game audio systems built around old audio engines (includes many frame-rate dependent bug fixes, deciphering file structure, support editing, overriding, and creating new instances of said file types). Extend static pathfinding for AI to support runtime modification with C++. Implement new features and bug fixes in a 20+ years old codebase. Work with design and art to create helpful tools and workflows to accomplish dynamic effects for different surface interactions. Write custom collision and physics solution for VR specific challenges with C++. Write latency resilient peer-to-peer networked projectiles in C++. Participate in technical review of code submissions. Update the production team on timelines and estimates on Jira tasks. Iterate with the design team on critical features.

### Conflict Kinetics: June 2018 – 2021

Unreal Engine 4 Developer

Create drill simulations for military marksmanship training. Perform a substantial amount of programming for vehicle, AI, and combat systems to meet drill requirements. Supplement missing blueprint functionality with C++. Program advanced pathfinding and traversal for crowd based characters. Program vehicle system for dynamic animation and advanced pathfinding and steering. Report defects and feature gaps in ToraUE via JIRA. Help define and document verbal requirements for new drills and drill enhancements into JIRA. Work with clients and internal business team to prototype drills and write development plans. Advise on source control. Perform builds/packaging of ToraUE and local testing of ToraUE at Sterling HQ. Supervise technical artist's tasks. Write technical documentation for systems.

#### **Little Arms Studios: June 2017 – June 2018** Programmer

Prototype and develop real-time fire simulation and environmental degradation. Develop networked firefighting mechanics. Program character controller and environment interactions. Work with design on balance and realism. Construct editor tools for level editing, and customizing simulations. Create Node based Editor System for constructing training modules for a drone flight simulator. Program visual effects using multithreading, Nvidia CG, and Unity ShaderLab. Document systems and maintain git, and SVN repos. Prototype VR and AR firefighting training simulations. [Agile development]

## **Education**

George Mason University (GPA 3.75) BFA in Computer Game Design (Spring 2017) Masters in Computer Science (Expected: Spring 2025)