# Vanan Andreas

# Game Programmer

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# Summary

Experienced Game Programmer with 4+ years of professional experience, adept at building robust gameplay, tools, and backend systems. Proficient in Unreal and Unity Engine development, utilizing C++, C#, Python, and Golang.

# Experience

Gameplay Programmer

Stairway Games

08/2024 - Present

Denpasar, ID

### Coral Island - Unreal Engine 4

- Refactored key single-player gameplay systems to support multiplayer.
- Ensured proper and optimized network synchronization using several advanced replication techniques such as ReplicationGraph, push-model networking and custom net serialization to support fast array replication and atomic replication.
- o Diagnosed and resolved critical gameplay bugs across both single and multiplayer modes.
- o Developed and integrated new gameplay features for both single and multiplayer modes.
- Contributed to successful console certification by ensuring compliance with PlayStation and Xbox technical and submission requirements.
- Handled integration of multiple console platforms to support crossplay across Steam, PlayStation 5, WinGDK and Xbox Series S/X via Epic Online Services.

Game Programmer08/2023 - 08/2024Brandoville StudiosJakarta, ID

### Unannounced Multiplayer Parkour Game - Unreal Engine 5

- Developed editor and runtime tool to visualize and manage Finite State Machines (FSM) in Unreal Engine to assist game designers and other gameplay programmers.
- Implemented character flip mechanic and skill gauge bar additions.

### Unannounced Multiplayer Twin Stick Shooter Game - Unreal Engine 5

- Conducted R&D for Gameplay Ability System (GAS) and Replication system for Multiplayer games using Unreal Engine.
- Converted an existing single-player game to multiplayer using GAS and a dedicated server with custom matchmaking using Golang and WebSocket to support cross-platform between PC and Mobile.

### Unannounced Single-player Souls-like Game - Unreal Engine 5

- Developed editor and runtime tool to visualize and create combo sequences integrated with GAS for easier tweaking by combat and game designers.
- Implemented AI behavior for enemies using StateTree.

# Internal Shopping App Project

- o Developed backend code for an internal shopping app project using Golang and MongoDB.
- Streamlined CI/CD pipeline from source control (git), dockerization to deployment using DigitalOcean.

### Internal

- o Developed a launcher tool for 3D artists and animators using Python.
- o Configured CI/CD pipeline using Jenkins and integration with Perforce.
- o Participated in peer code reviews, contributing to improved code quality and knowledge sharing.

Senior XR Developer 08/2022 - 08/2023

# Human Chatbot App - Unreal Engine

- o Conducted R&D for chatbot services (Rasa, Dialogflow, ChatGPT).
- Created generic template projects for Unity and Unreal that have been integrated to chatbot services.
- o Developed a chatbot app using MetaHuman and Unreal Engine.

### Internal Streamable Metaverse Platform - Unity

- o Developed and maintained internal modules for streamable multiplayer metaverse platforms using Unity.
- Created an editor tool to streamline integration of character creation meshes and props.
- o Integrated user created character properties with the backend via REST API.

#### Internal

- $\circ\,$  Mentored incoming interns.
- o Rejuvenated internal Git and pipeline processes for the whole team.

XR Developer 08/2021 - 08/2022

FXMedia Internet Pte Ltd

Singapore, SG

- o Developed mobile AR applications primarily using Unity and ARFoundation.
- o Created VR applications using Unity and Unreal Engine, targeting Meta Quest 1 & 2 and HP Omnicept G2.

# **Unity Developer Intern**

06/2020 - 08/2021

FXMedia Internet Pte Ltd

Singapore, SG

 Actively supported single-player and multiplayer Unity projects, assisting in the development of features for WebGL, mobile AR, and Desktop platforms.

# **Certification and Licenses**

- o Unity Certified Professional: Programmer
- o AWS Academy Graduate Cloud Development

### Education

Kalbis InstituteJakarta, IDBachelor of Computer Science - GPA: 3.892017-2021

#### Skills

### Game Engines

- Unreal Engine (UE4, UE5)
- Unity

# **Programming Languages**

- ° C++
- ∘ C#
- Golang
- o Python

# Source Control

- o Git
- o Perforce

# Methodologies

- Object-oriented programming
- Event-based architecture
- Agile/Scrum development

# **Technologies**

- Gameplay Ability System
- o Slate UI Framework
- o Unreal Replication System
- Unreal Dedicated Server
- Mirror Multiplayer
- Photon PUN2
- Jenkins
- MongoDB
- Docker

### **Soft Skills**

- Technical mentorship
- Code review and knowledge sharing
- Cross-disciplinary collaboration