Ventures, Matthew
MrVentures.net

Tools & Gameplay Engineer

B.Sc. CS, Stanford University

C++/C# engineer with 6+ years of experience specialized in developing tools, gameplay features, and AI behavior at AAA-scale. Passionate about performance optimization, documentation, and building teams to drive ambitious projects.

MAIN QUESTS

Amazon Games – *San Diego, CA – Nov-2023 to Present*
Gameplay & Tools Engineer in Unreal Engine 5 (C++)(BP aka Blueprints) on ***Unannounced AAA game***
- Designed C++/BP architecture for the staging and UI of conversations between players and gen-AI NPCs, supporting dynamic LLM-driven animations and real-time responses to player input
- Instrumented UE5 project's editor load and automated uploading telemetry-data to CloudWatch
- Led Confluence documentation efforts across the team, contributing >20% of all engineering docs
- Parallelized data object loading to achieve a 7.2x (20.9s → 2.9s) improvement in editor load times
- Organized project-wide bug burndown, eliminating 875 asset errors, and implemented validation workflows to detect and prevent future regressions
- Led the Diversity Equity and Inclusion book club for all of Amazon Games 15+ consecutive months

id Software – *Remote – Mar-2022 to Nov-2023*
Gameplay & AI Engineer in custom engine (C++) on ***Doom: The Dark Ages***
- Led engineering support for several AI (Kreed Maykr, Imp Stalker, and Acolyte)
- Integrated cutting-edge destruction physics (Havok) into custom engine (id Tech 8)
- Led Confluence documentation efforts across the team, contributing ~50% of all engineering docs
- Started "Engineer's Book Club" for team to regularly discuss AI whitepapers and tech talks

Raven Software (Activision-Blizzard-King) – *Remote – Nov-2020 to Feb-2022*
Gameplay Engineer (Assoc.) in custom engine (C++)(GSC)(Lua) on ***Call of Duty: Warzone***
- Designed and implemented new game modes from ideation to deployment
- Led implementation for seasonal content including Festive Fervor's Christmas trees & elves
- Assisted in coordinating a cross-studio team to collaborate on engine documentation

SIDE QUESTS

Ventures Ventures LLC & Black Vein Productions (weekend indie projects) – *2016-Present*
Engineering / Design in Unity (C#)
- Developed award-winning indie games played by millions of players worldwide
- Featured by IGN: tinyurl.com/ign-dad

Stanford University – *Stanford, CA – 2017-2019*
Course Instructor
- Led development and instruction of Stanford's games course: stanfordgamedev.weebly.com
- Mentored students creating games and starting careers in the game development industry

STARTER QUESTS (Internships)

Epic Games – *Remote – 2020*
Gameplay Engineer (intern) in Unreal Engine on ***Fortnite Creative***
- Improved multiplayer level-design tools for player creators

Manticore Games – *San Mateo, CA – 2019*
Developer Relations / Gameplay Engineer (intern) for ***Core, a custom UE4-based engine*** *(Lua)*
- Created user-facing documentation and tutorials for making games

Sony Santa Monica – *Playa Vista, CA – 2019*
Gameplay Engineer (contractor) in custom engine (C++) on ***God of War: Ragnarök***
• Collaborated with animators to create tools for animation runtime debugging
• Supported designers by creating AI function nodes for visual-scripting behavior trees

Hangar 13 (2K Games) – *Novato, CA – 2018*
Gameplay Engineer (intern) in custom engine (C++) (Lua) on ***Unannounced (Cancelled)***
• Implemented player-combat abilities for an unannounced title

Facebook – *Menlo Park, CA – 2017*
Software Engineer (intern) in Unity VR (C#) on ***Facebook Spaces***
• Facilitated rapid iteration of new user-facing VR-interactables for Facebook Spaces
• Implemented networking support for persistent data

Iron Tiger (NCsoft) – *Menlo Park, CA – 2017*
Tools Engineer (contractor) in Unity Mobile (C#) on ***Unannounced (Cancelled)***
• Created a testing suite for the design team to rapidly evaluate player loadouts

Tilting Point – *New York City, NY – Winter 2016*
Game Designer (intern) on ***Pool Elite***
• Simulated in-game economies to advise design of player monetization

Zynga – *San Francisco, CA – Summer 2016*
Gameplay Engineer (intern) in Java & Unity Mobile / VR (C#) on ***Unannounced (Cancelled)***
• Rapid development/prototyping of new game ideas, automated scenario testing

International Pharmaceutical Federation (FIP) – *Ontario, Canada – 2013-2021*
Engineer in Java & Unity Mobile (C#) on ***FIP Glyph****: fip-glyph.weebly.com*
• Designed and implemented app to translate, orate, and visually depict medication instructions
• Google Fair finalist, Intel ISEF & STS finalist, NY Science Fair finalist, US Surgeon General's Award

NASA – *New York City, New York – Summers of 2013 & 2014*
• Studied El Niño Southern Oscillation and its impact on Southeast Asian economies
• Predicted coronal mass ejections based on solar flare data, presented research at AGU conference

SS&C – *New York City, New York – Summer of 2012*
Software Engineer (intern) (Java)
• Implemented utility functions for insurance applications

ACHIEVEMENTS of 2025

- GDC Conference Speaker on advocacy: tinyurl.com/ventures-gdc
- Game Dev Heroes Finalist for industry advocacy: tinyurl.com/ventures-gdh
- Internationally published author of game maths textbook: tinyurl.com/ventures-book

SKILL POINTS

- Two Black Belts (Taekwondo & Jiu-jitsu)
- Eagle Scout, with an archery merit badge
- Time Magazine's 2006 Person of the Year
- Google Play game design awards finalist

LEADERBOARD

- 2000+ games in Halo 3 (rank: Commander)
- 2400+ hours in Runescape: tinyurl.com/ritjames (Level 99 in Fishing)
- 2100+ hours in Escape from Tarkov