Ventures
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# Software 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

**Snap Inc.** – *Los Angeles, CA – Jan-2026 to Present*
*AR / AI Engineer (C++, TS, JS) on Lens Studio (a public game engine) for AR (SPECS) and mobile*

- Led agentic-testing across an 81-person team, deploying cloud build agents to asynchronously validate in-house Lens Studio AI skills for Claude, Codex, and Cursor.
- The automated pipeline dynamically provisioned PCs, from a pool of 39 build machines, to download the latest Lens Studio builds, sync targeted commits from a skills repository, and execute both scenario and agentic testing to pinpoint system improvements.
- Infrastructure included Slack notifications to alert developers of build results in real-time, scheduled testing to identify regressions early, and support of A/B testing extensions for developers to test their skill changes prior to submission.
- Managed contractors from a 3rd party company to identify gaps in our documentation's "AEO" (AI search optimization) and drive improvement.
- Championed customer perspective by continuously auditing our software to identify and eliminate critical UX blind-spots —mobilizing 15+ cross-functional contributors to resolve key friction points.
- Pioneered use of agentic AI workflows in my software development, ranking in the top 2% (#13 of 769 developers in Snap Inc.) for AI-generated code contribution across the company.
- Wrote user-facing docs for CLAD (Lens Studio's agentic workflow), including front-end development of all the web pages on our public-facing site: https://developers.specs.com/docs/clad.

**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