

Senior Software Engineer and Game Designer

20 years of game design and full-stack software engineering experience

Creator and designer of innovative, award-winning video games. Software engineer with strong architectural skills and extensive experience working on complex projects. Static typing advocate. Communicates and collaborates well with technical and non-technical folks.

TECHNICAL SKILLS

LANGUAGES: C#, Python, TypeScript + JS, C/C++, Obj-C, Swift, Java
TOOLS, FRAMEWORKS: Unity, iOS, React.js, pixi.js, Postgres, .NET, Adobe AIR

PROFESSIONAL HISTORY

"THE FEAST" GAME - PHILADELPHIA, PA
Design + engineering director

JULY 2023 - CURRENT

Leading a team of 5 building "[The Feast](#)", an ambitious + stylish 3D stealth action game about being hunted by cannibal aristocrats. Launching in 2027 for PC, Mac, and consoles.

SNOWFLAKE - SAN MATEO, CA
Tech lead on the Streamlit open source library

APRIL 2022 - JULY 2023

I joined Streamlit full-time for the Snowflake acquisition, working with Snowflake engineers to integrate Streamlit into the Snowflake platform, and continuing to lead development on the Streamlit open source project.

- Lead on "[Streamlit in Snowflake](#)", refactoring Streamlit to run natively in Snowflake dbs
- Created the official [Streamlit LangChain integration](#) for building Streamlit LLM apps

STREAMLIT - SAN FRANCISCO, CA
Software engineering consultant

FEBRUARY 2019 - APRIL 2022

Engineer #2 at [Streamlit](#), building a popular AI and data science visualization library. Streamlit was acquired by Snowflake for \$800M. I wrote a plurality of the code in the library.

- Designed and created the Streamlit "[Custom Components](#)" framework
- Re-architected and rebuilt the [Streamlit caching layer](#)
- Created "[fastReruns](#)", improving response time of complex Streamlit apps up to 100X

STANFORD UNIVERSITY (REMOTE)
Remote software engineering consultant

APRIL 2018 - OCTOBER 2018

Worked with Dr. Rhiju Das and his biochemistry lab to port [Eterna](#), a citizen science tool for RNA medicine research, to a modern web stack, keeping the project online in the wake of Flash's obsolescence.

- Ported 80k lines of ActionScript/Flash to [TypeScript + WebAssembly](#)

BODY LABS - NEW YORK, NY (REMOTE)
Remote software engineering consultant

JANUARY 2016 - SEPTEMBER 2017

Developed numerous computer vision research apps, focused on sensor data gathering + synthesis. Body Labs was acquired by Amazon at the end of my consultancy.

- Responsible for rapidly researching and implementing projects based on new, nascent, and otherwise obscure technologies, including TensorFlow, WebRTC, Metal shaders, &c
- Core developer on “Mosh Camera”, a commercially-released augmented reality app: take 2D pictures of people and drape them in 3D outfits and scenes.
- Created a handheld 3D point cloud scanning app, using the Occipital Structure sensor, for capturing and storing 3D scans of human bodies.

“ANTIHERO” GAME PROJECT – SAN FRANCISCO, CA

NOVEMBER 2012 - JULY 2017

Sole designer & programmer for *Antihero* (antihero-game.com), an original online multiplayer game for Mac, Windows, iOS, and Android. Winner of numerous industry awards.

- Original game design centered around strategically deep, short-session gameplay. “Civilization meets Hero Academy by way of Oliver Twist.”
- Featured on the App Store’s “Game of the Day”, “New Games We Love”, and in the top 10 “Top Paid Games”.
- “Best Strategy Game of 2017” - World of Games magazine; official selection in numerous events and shows; 81 Metacritic score.

THREE RINGS DESIGN/SEGA – SAN FRANCISCO, CA

NOVEMBER 2007 – NOVEMBER 2012

Senior Software Engineer and Game Design Lead

Led game design and development on a number of titles at Three Rings Design, a pioneer in the indie MMO world. Extensive engineering experience in all layers of MMO architecture.

Shipped Titles (partial list)

- [Corpse Craft](#) - single-player/networked multiplayer game for iOS, written in C++. I was the project lead, lead engineer, and lead designer on the game. Corpse Craft won “Best Commercial Game” at the 2009 Mochi Awards.
- [Doctor Who: Worlds In Time](#) – browser-based MMO. ActionScript client; Java backend. I was lead engineer and designer of the “Intervention” system (game’s core mechanic).
- [Whirled](#) – social network/MMO/kitchen-sink thing. ActionScript frontend; Java backend. I designed and wrote a number of multiplayer minigames within Whirled.

GAMELAB, LLC – NEW YORK, NEW YORK

AUGUST 2005 – SEPTEMBER 2007

Programming Team Director.

Lead engineer on multiple shipped game titles. Transitioned the programming team from Macromedia Director to C++.

EDUCATION

Brown University, Providence, Rhode Island
Bachelor of Science in Computer Science, 2004