

JAKE LIVAK

Senior/Lead Full-Stack Developer

12+ Years Experience

With additional professional experience in game development, project management, 2D/3D graphics, and 3D modeling/texturing/rendering.

INTRODUCTION

I'm Jake, a seasoned software developer with a unique background in computer science, fine art, and 3D modeling. I spent the first 9 years of my career at development agencies, honing a versatile skill set across many technologies and numerous client projects. When developing, I prefer thoroughness over speed, and strive to create pixel-perfect, visually captivating UIs. I also have a deep passion for software and cloud architecture, finding satisfaction when various disparate parts of a project come together in perfect synergy.

PROFESSIONAL SKILLS

Over my career, I've worked with a variety of technologies/tools and have done significant work with the following...

Frontend Development

- ❖ Javascript/Typescript ❖
- ❖ React ❖
- ❖ Native Android (Java) ❖
- ❖ Three.js/Babylon.js ❖
- ❖ HTML5 Canvas ❖

Game Development

- ❖ Unity ❖
- ❖ Unreal Engine ❖
- ❖ Custom Shaders ❖
- ❖ Azure PlayFab ❖
- ❖ Maya Python Scripts ❖

Backend Development

- ❖ C#/.NET ❖
- ❖ Node.js ❖
- ❖ Elixir w/ Phoenix & Ecto ❖
- ❖ MSSQL & PostgreSQL ❖
- ❖ Database Administration ❖

Leadership

- ❖ Project Scoping ❖
- ❖ Project Management ❖
- ❖ Agile Sprints & Kanban ❖
- ❖ Technical Leadership ❖
- ❖ Developer Mentoring ❖

Cloud and DevOps

- ❖ Github Actions ❖
- ❖ Azure DevOps ❖
- ❖ Azure/AWS ❖
- ❖ High Availability Hosting ❖

3D Modeling

- ❖ 3D Modeling in Maya ❖
- ❖ ZBrush Sculpting ❖
- ❖ Texturing in Substance ❖
- ❖ Designer/Painter ❖

PAST CLIENTS

I've had extensive experience in creating, managing, and developing enterprise-scale solutions for various companies, including...



Microsoft



TikTok



Ernst & Young



Showtime



DigiKey

EXPERIENCE

Senior Software Engineer @ Inkarnate

2022 - Present

Worked with a globally-distributed remote team developing and maintaining a web-based fantasy/sci-fi map editor built with React+MobX, Typescript, and HTML5 canvas APIs on the frontend and Elixir + Phoenix/Ecto/PostgreSQL on the backend. Additionally, I performed DevOps tasks in GitHub, cloud admin tasks in AWS & Azure, and engaged with our community online and at events such as GenCon.

EXPERIENCE CONT.

Lead Web Developer @ Subvrsive

2020 - 2022

Led and managed a development team crafting diverse web-based 2D and 3D experiences utilizing TypeScript, React, Three.js/Babylon.js and Node.js. Performed lead tasks such as project scoping and architecting, developer mentoring, and team hiring. Streamlined internal 3D art pipeline with custom Autodesk Maya plugins written in Python. Administered DevOps and cloud infrastructure in Azure and AWS. Took over 3D artist and project manager responsibilities while understaffed.

Software Developer @ The Garrigan Lyman Group Contract Unity Developer @ The Garrigan Lyman Group

2019-2020

Worked on various React & Angular websites, Node.js servers, Unity games, and mobile apps.

Software Engineer @ Zenware Inc

2012-2019

Developed various .NET, Angular, and Android projects. Performed MSSQL database administration.

Owner @ AESTHETIC.ART

2023 - Present

A passion project/side hustle designing and producing various tabletop gaming accessories. I handle all aspects of the business such as product/packaging design, manufacturer sourcing, international logistics, 3D printer farm management, and e-commerce.

OPEN SOURCE WORKS

phoenix-websocket

[Link](#)

Creator and maintainer of a TypeScript library used for interfacing with Elixir backends utilizing Phoenix Channels. This provides various ease-of-use improvements over the stock phoenix library.

environment-variable-replacer

[Link](#)

Creator and maintainer of small GitHub Actions script used in various deployment pipelines to replace multiple environment variable placeholders in files.

SaveReminder

[Link](#)

A C# windows application that allows the user to configure alerts which fire when a configured program is running, reminding the user to save at a preset interval.

Three.js, Babylon.js, pnpm

Contributor of bug fixes and usability improvements to these libraries.

EDUCATION

Bachelor's Degree in Interdisciplinary Professional Studies

(With Emphasis on Computer Science and Fine Arts)

Boise State University

3D Environment Arts Program Certificate (2-Year)

CG Master Academy

Database Design Specialist Certification

Certification Partners CIW

LINKS

❖ [GitHub](#) ❖ [LinkedIn](#) ❖ [ArtStation](#) ❖ [Personal Site](#) ❖

PROFESSIONAL WORK PORTFOLIO

Inkarnate Fantasy Map Editor (Ongoing)

[Link](#)

A browser-based fantasy and sci-fi map editor with rich image and text editing capabilities, built with HTML5 Canvas, WebGL, React, and Typescript. I built and added various features (such as customizable shadows, autosaving, etc.) as well as performed rigorous performance tuning to reduce memory-related browser crashes by over 75%. In addition I performed various maintenance and feature development on our backend APIs built with Elixir/Phoenix/Ecto, administration of our cloud hosting (with AWS, Azure, and Netlify), and brought us into GDPR/CCPA compliance.

Undisclosed Multiplayer Web Gaming Project

A web-based multiplayer gaming project utilizing WebSockets and Azure PlayFab for dynamic game server creation and scaling, with a Three.js/React/Typescript frontend, Node.js backend, and C# game servers. I oversaw this project from creation; creating architecture diagrams to hand off to the rest of my team, performing all cloud related setup and management within Azure and PlayFab (\$15,000+ monthly spend), performed regular code reviews and progress check-ins, and complied with all our enterprise client's security and up-time requirements. This project was rigorously performance tested to handle an influx of 50,000 users within one minute.

DigiKey 3D Product Showcase

[Link](#)

A navigable and interactable 3D environment rendered on the web using Babylon.js/React/Typescript which allows users to explore branded experiences, discover products, and view them in 360. I managed and architected this project, ensured steady progress with internal and outsourced engineers, and also worked with our in-house artists to create a custom 3D art pipeline utilizing Autodesk Maya scripts written in Python.

Showtime Shameless TV Finale Live Event Site and 360 Environment

[Link](#)

A Webby-nominated live event site featuring a countdown and time-base page access to coincide with the airing of the final Shameless TV episode, which included a live stream landing page and explorable 3D recreations of sets from the show. This was built with a Three.js/React/Typescript frontend, and an Azure hosted Node.js backend. Our site was performance tested to handle an influx of 250,000 users within one minute.

Vital Farms 360 Video Web Platform

[Link](#)

A custom, mobile-friendly, embeddable 360 video player created using Three.js/React/Typescript, as well as a custom CMS backend allowing for video uploading, processing, and management built with Node.js, Azure Functions, Azure Media Services, Azure CDN, and Docker.

ATDMobile Interactive Tire Sales Mobile App

[Link](#)

A B2B tire/wheel sales app built using the Unity game engine (with some platform specific Java/Objective-C code) featuring complex UI animation and 3D tire/wheel visualization.

GuardianRFID Inmate Management System

[Link](#)

A nationally deployed inmate management system featuring a native Android application and a .NET server backend with enterprise-scale Sql Server database administration requirements.