# Summary

I am a full-stack software engineer with a strong background in gameplay engineering, bringing over six years of experience in crafting clean, modular, and efficient code. I thrive on solving technical challenges such as optimizing real-time performance, enhancing engine architecture, and building scalable backend systems. Whether it's integrating new technologies, refining frameworks, or designing resilient infrastructures, I am driven by continuous learning and collaboration. I aspire to expand my expertise in improving developer experience and high-level architectural design, contributing to developing impactful and innovative software.

## Skills

SE Skills I Readable, Modular, Encapsulated, Extensible, Comprehensive

**Tools or Languages** I JavaScript, TypeScript, Next.js, T3 Stack, React, Express, tRPC, Node.js, SQL, JSON, Tailwind CSS, Git **Project Skills** I Collaborative, Passionate, Prototyping, Research, Learning, Integration, Inclusive, Curious

# Professional Experience

Software Engineer, Fellow | General Assembly | Remote

Nov 2024 - Feb 2025

Completed a full-stack development program, delivering 4 projects across the full software development lifecycle.

#### **Projects:**

Fullstack Web Developer | Scratch Notes | Website | February 2025

Technology: TypeScript, Prisma, tRPC, Express, MongoDB, Node.js, Nx

Focused on redesigning a school project to improve developer experience and functionality using production-quality technologies.

- Refactored homebrew solutions by integrating tRPC, Prisma, and ReactFlow libraries for an easier and more robust developer experience.
- Handled the deployment of backend and frontend within one consolidated mono repo utilizing Nx cli.

Backend Web Developer | FEASTMODE | Website | February 2025

Technology: Python, Django, Neon PostgreSQL, HTML, CSS

Completed a full-stack development project, focused on both frontend and backend development.

• Led project by emphasizing problem-solving through debugging, optimization, handling merge conflicts, and managing the PostgreSQL database.

Frontend Web Developer | Minesweeper | Website | December 2024

Technology: JavaScript, HTML, CSS

Developed native JavaScript frontend web app emulating the original Minesweeper game with highly dynamic CSS selectors.

- Designed CSS selectors to obfuscate menu state from business logic, ensuring simpler code changes without fear of breaking UI.
- Created a fun toy box feature by re-using pre-existing modular frontend components.

### Software Engineer II | Age of Learning | Remote

May 2021 - Dec 2022

Completed launching a new game mode, Intellipet Adventures, as part of the core team to improve user retention and maintained and integrated features into Adventure Academy.

#### Projects:

Gameplay Engineer | Intellipet Adventures | Website | October 2022

Technology: C#, .NET, Unity, Docker

Launched Intellipet Adventures as part of the core team, developing a new game mode to increase user retention.

- Engaged with cross-functional teams (API and Realtime Servers) to integrate gameplay features.
- Integrated sub-game mode inside parent app Adventure Academy using the dependency injection design pattern.
- Executing successfully and quickly on Intellipets led me to move onto the Prototyping team to test and develop new features with the potential of being moved into Adventure Academy.

Frontend Engineer | Adventure Academy | Website | May 2021

Technology: C#, .NET, Unity, Docker

Participated in maintaining a large-scale MMO game catered towards gamifying education for elementary schoolers.

- Debugged, tested, and integrated new UI while hitting Kanban milestones.
- Refactored in-game marketplace UI, collaborating with the API team.

### Gameplay Engineer | WayForward Technologies | Santa Clarita

Feb 2019 - Apr 2021

Completed the launch and maintenance of Marble Knights, contributing as a core member of the team.

#### **Projects:**

Gameplay Engineer | Marble Knights | Website | September 2020

**Technology:** C#, Unity

Launched a 4-player cooperative online game as one of Apple Arcade's flagship titles.

- Developed a framework using a finite state machine (FSM) to manage boss behavior, enabling the team to decrease code redundancy and reduce time spent coding.
- Coded components for a weapon system that exposed GUI tooling for designers to tweak without any code recompilation.
- Created and maintained 3/6 minigames that shipped post-launch of the game, one of which was recognized by the owner as extremely fun.
- Collaborated closely with animators, designers, and the creative director to create tools to expedite and improve their designer experience in creating levels.

### **Gameplay Engineer | Game Mechanic Studios | Burbank**

Jan 2017 - Feb 2019

Collaborated as part of a small studio creating games for hire, working with the project manager, CEO, animators, level designers, and lead artist.

#### Projects:

Frontend Engineer | Cinemoi World | Website | Feb 2019

**Technology:** C#, Unity

Focused on improving build times by expediting and improving art pipelines.

- Refactored avatar clothing system to load items dynamically, which improved the artists and designers' workload by removing the need to reimport an unwieldy mega-asset.
- Deployed an asset bundling system to store clothing and levels to an S3 bucket, which reduced build times by 80%
- Collaborated with business and third-party developers to integrate Stripe and PlayFab API to manage purchases and users' inventory.

Frontend Engineer | Wizards: Wand of Epicocity | Website | May 2018

**Technology:** C#, Unity

Collaborated with senior engineer and senior artist to integrate wireframes and APIs.

• Optimized and refactored UI by working closely with the lead UI/UX designer to match industry standards, by reworking the art-to-engine pipeline.

Fullstack Engineer | Deer Hunter: Reloaded | Website | October 2017

**Technology:** C#, Unity

Executed on a tight deadline to deploy Deer Hunter on 3 different platforms.

- Executed TRCs to pass for Xbox and PlayStation deployment.
- Created animal behavior and flocking system, by collaborating closely with designers to create a realistic simulation of hunting patterns.
- Integrated and maintained the PC input mapping system using the Rewired plugin, which accounted for a specific genre of clients.

### Education

**Software Engineering Bootcamp - Certificate of Completion** | General Assembly | Remote

February 2025

Bachelor of Science Video Game Programming | Art Institute of California, Los Angeles | Santa Monica

June 2016