

Dedicated software engineer with over five years of hands-on experience and a deep passion for video game design and development. Holistically-minded with an interest in continuous learning, performing cross-disciplinary work, and drawing knowledge from diverse sources. Effective communicator and collaborator skilled in developing meaningful relationships with peers and leadership.

EXPERIENCE

CAREER BREAK

Edinburgh, UK & San Francisco, USA • Sept 2023 – present

Impacted by a large layoff at bigspark. Traveled to Mexico and Germany, and spent time focused on upskilling in game development and design (see projects).

SENIOR SOFTWARE ENGINEER BIGSPARK

Edinburgh, UK • Jan 2021 – Sept 2023

bigspark provides software consulting services focused on Big Data, AI, and FinTech solutions.

Hired as employee 10 in a fully remote hands-on role and promoted to take on additional leadership responsibilities, managing up to three direct reports.

- Provided leadership and hands-on technical services for a bigspark client (tier 1 US bank).
 - Managed a team of data engineers and data analysts to architect and build a hybrid cloud/on-prem data flow for 30 data sources using Snowflake and StreamSets.
 - Automated build and deployment pipelines for Scala microservices production releases at enterprise scale using TeamCity, Ansible, and AutoSys.
- Guided an intern team in development of an internal data quality tool built on Apache Spark and Amazon Deequ, with the tool later in planning to be commercialized.
- Led front-end development for serverless Vue/Nuxt web app built for use in warehouses.
- Contributed to development of a blockchain-based ticketing app (Vue/Nuxt, TypeScript) and a mental health services app.

SOFTWARE ENGINEER PUBLICIS SAPIENT

New York, USA • June 2021 – Oct 2020

Publicis Sapient is a global digital transformation consulting company.

Hired after graduation and assigned to support development of Marcel, a global networking platform with 80k users, with work focused on JavaScript and Python.

- Implemented Agile and Kanban methodologies for development teams.
- Developed and launched a suite of ExpressJS microservices for Natural Language Processing to replace an expensive black-box solution.
- Engineered an analytics platform for Data Science & Analytics team using Azure Databricks and GraphQL interface.
- Wrote a QA tool in TensorFlow and Docker containers that analyzed the output of an NLP chatbot to optimize intent definitions.

Prior experience includes development roles using Ruby on Rails, ReactJS, Java, and ActionScript.

PROJECTS

- **C++/OpenGL 3D Engine** ([repo](#)) - Created a Data-Oriented-Design (DOD) game engine utilizing Entity Component System (ECS) design pattern. Embedded Lua and Python scripting systems for gameplay logic. Implemented Tetris gameplay as an example.
- **Personal Website** ([repo](#)) - Designed, implemented, and deployed full PWA, SPA-modeled website with UI/UX built using Vue, Nuxt, and TypeScript. Hosted on Netlify's global CDN. Previous versions of the website include a static site hosted on Firebase ([repo](#)) and a Django site on Heroku ([repo](#)).
- **Meowtchmaker** ([repo](#), [site](#)) - Wrote a "Joined Together" card-based matchmaking game in Unity (as part of GMTK Game Jam 2021 "Joined Together" theme). Led development and project management.

PROJECTS

(CONTINUED)

- **Born to Die** ([repo](#), [site](#)) - Developed a board-game themed adventure game (as part of GMTK Game Jam 2022 “Roll of the Dice” theme). Led design, composed music, and programmed main gameplay loop in Unity C#.
- **Life of Prey** ([repo](#), [site](#)) - Built a hunting game in Godot/GDScript where the player is hunted (as part of GMTK Game Jam 2023 “Roles Reversed” theme). Developed procedural level generation, integrated SFX, menus, and animations.
- **Distant Stars 5e Campaign** — Designed, wrote, and ran a four-year D&D 5e campaign for three players through adventures of political intrigue and exploration in a homebrew Science-Fantasy setting. Highlights include a mini-game ‘Dungeon Wars’ inspired by Storage Wars and an underworld trial adventure based on Dante’s Inferno. Leveraged Roll20 for virtual gameplay and crafted immersive game maps using Inkarnate.
- **Boughs of Myth PF2 Campaign** — Designed, wrote, and organized a West Marches-style Pathfinder 2e campaign to explore real-world mythologies in a homebrew Mythic Fantasy setting and accommodate varying player availability. Migrated to FoundryVTT and OneNote for more advanced features like hyperlinking, scripting, and system integration.

SKILLS

Programming: Bash, C/C++, CSS3/HTML5, Java, JavaScript/TypeScript, Python, Scala, SQL

Tools: AWS, Git, Godot, (GDScript), GraphQL, \LaTeX , Node.js, Neo4J, ReactJS, TeamCity, Unity (C#), Unreal Engine 5 (Blueprint/C++), Vue.js (Nuxt)

Other: Agile/Scrum, Confluence/JIRA, Kanban, Fluent English, Intermediate Spanish

EDUCATION

BS, COMPUTER SCIENCE CALIFORNIA POLYTECHNIC STATE UNIVERSITY, SAN LUIS OBISPO (2018)

- Completed a minor in English, including Applied Linguistics and Creative Writing.
- Completed a semester abroad at Swinburne University of Technology in Melbourne, Australia.

INTERESTS

Playing Music: guitar, bass, piano

Tabletop Games: Dungeons & Dragons (4e/5e), Pathfinder 2e, Starfinder, Call of Cthulhu 7e, Masks, Dungeon World

Video Games: Binding of Isaac, Red Dead Redemption, Europa Universalis IV, Victoria III, Kingdom Hearts II, Hades, Fallout: New Vegas