

Daniel Lowe | Fullstack Software Engineer

EnterGrip, 2022 to 2024

Solo game development studio focusing on commercial PC / Steam titles

Working on all the systems for a 2D, sprite-based platformer, including many custom tools for automating workflows and procedurally laying out content, a backend for leaderboards, pixel art and animation, replays and save states, 500+ playtesters and feedback, level design, gameplay programming, marketing, trailers, and Steam page optimization.

Continuing to experiment and prototype in Godot (C#), Unreal (C++ / Blueprints) and Unity (C#)

BGC Technology, Senior Web Developer 2021 to 2022

An in-house financial electronic trading platform built in React/Typescript

Events, actions, and notifications: Created a system and interface where users could subscribe to updates in financial data, then issue one of many, extensible actions or UI events based on user-defined constraints and values. For example, create a desktop pop-up or play a specific sound if a certain stock price goes above a specific threshold

Real-time interprocess communication: The primary software application was distributed across several different windows, tabs, and processes. I implemented an architecture where any view or application could communicate state and keep everything in sync using a standard interface

- Native Broadcast API to send and receive messages across processes
- Native event listeners to communicate changes locally (within processes)
- React Hooks and Redux to manage state as information was sent and received

User preferences: Designed the data model, API, and UI allowing users to customize application. Settings included window placement, tab order, layouts and actions based on incoming data

Bloomberg: Senior Software Engineer, 2019 to 2021

Microfrontend architecture: Modified existing architecture to allow developers from multiple teams to deploy web apps using any framework to a centralized web portal at the click of a button

- Enabled developers to deploy React (and other framework) apps to web portal for the first time (instead of only Angular)
- Over a dozen new web applications deployed within first 6 months of launch
- Deployment handles hosting application assets and configuring NGINX / site URLs all based on configuration, with minimal “click-of-a-button” deployment steps using Jenkins and underlying Jenkins and bash scripts

Multiple backend APIs: Contributed to multiple backend APIs for various services to power frontend applications using Go and Python

Admin tools and dashboards: Created UIs in both Angular and React to provide developers with visibility and control over resources created for their applications

DotAlign: Fullstack Software Engineer, 2017 to 2019

A cloud-based automated CRM and networking application using email data

Docker / Kubernetes migration: Led port from Windows app to cloud container architecture, improving ability to deploy at scale

- Containerized app logic and standardized deployment and service configuration
- Automated pod deployment through REST API service
- Reduced projected container cost estimate from \$50/day per user to \$0 by limiting I/O