

SUMMARY

I'm a full stack software engineer specializing in the Web3 stack and both server-side and client-side using mostly TypeScript and the .NET framework. With over 8 years of professional experience, I have had the opportunity to work on bleeding edge products in Web3 and have previously been part of the Zero Knowledge University sponsored by Harmony, where I learned how to write ZKPs. I have recently been putting on the auditing hat by working as a smart contract auditor as well. In Web2, I worked on projects that run the gambit from federal government tools, private business enterprise applications, custom websites for digital marketing agencies, and working entrepreneurally as a freelance consultant. In my next role, I am looking forward to continuing to move the needle in Web3 by being innovative and contributing to building the future of the decentralized web with my next employer. I hope to work alongside a team that is as passionate about changing our internet landscape as I am. LFG!

EXPERIENCE

Aave Companies Senior Full Stack Engineer

Jul 2022 - Feb 2023 · London, UK (Remote)

- Providing full stack engineering support on the interface team for the Aave Protocol. We owned the client application at app.aave.com, which included a Next.js user interface, client-side Web3 helper libraries, a backend Node.js API, a MongoDB database, and middleware libraries that would interact and make calls to the Solidity smart contracts for the protocol. I made code contributions to all of these layers during my time at this role.
- I helped improve the open source repository documents which outlined how developers could clone or fork our codebase and build their own user interface. I authored the README.md and CONTRIBUTING.md documents that outlined how developers could contribute effectively to the open source repository, which were lacking descriptive information when I joined.
- I helped design an open-source tracking system that we used for managing open issues and pull requests from the community as well as how we could use Github internally for tracking internal feature work, bugs, and improvements to the codebase.
- I advocated for and set up automated pre-commit and pre-push hooks which ran a complex suite of linting and code style configs to keep all of our files consistent prior to them making their way into a pull request or to the remote branches. This also included using Commitlint, which enforced consistent commit messages to keep git history clean and descriptive.
- I advocated for and set up a unit testing harness as well as automation for running these as part of pull requests which did not exist beforehand, and advocated to the team to start writing unit tests for any utilities or non-component-based code that we would write, which did not exist prior to my joining.
- I participated in cross-team discussions about what the interface means for an open source web3 protocol and how it fits into the broader scope, and helped to author community messaging about that to create clarity.
- I worked alongside other interface engineers, designers, product owners, smart contract engineers, dev ops, and quality assurance engineers, and the C-level executives on a daily or as needed basis to ensure we were aligned in our code execution and meeting our overall objectives within the Aave Companies.
- I triaged and prioritized open source issues and pull requests from the community and engaged directly with open source devs by performing peer reviews and having discussion.
- I collaborated with BGD to align objectives and code architectural changes or concerns that would improve the interface.
- I collaborated with other web3 teams on code integration while also guiding our code style preferences for their engineers to implement the different features using their products and technologies within our codebase.
- Tech Used: TypeScript, Next.js, Node, React, IPFS, MongoDB, Jest, Cypress, Solidity, Tenderly, Figma, Github

Arbor Labs Co-Founder / CTO

Feb 2022 - Dec 2022 · United States (Remote)

- [Arbor Protocol](#) is a Web3 protocol and product centered around generative music NFTs with royalties baked in. Users can upload stems (individual instruments within a track) to an Arbor musical "project", where others may listen and playback. Other collaborators can add stems onto the project to build up a song, which can then be minted as an NFT. All stems and NFT metadata is stored on IPFS via NFT.storage at Protocol Labs.
- The mint price is evenly distributed among all collaborators, and the NFT can be listed for sale on the secondary market. When a secondary sale is made, the seller receives 90% of the proceeds and the other 10% is split evenly among the collaborators in the form of royalties, all on-chain.
- This project started at the ETHDenver IRL hackathon which one first prize from Filecoin. We went on to build this during the ETHDenver virtual hackathon the following month and won top placements in the NFT category, top 30 overall projects, and top 5 projects from celebrity judges. We're using the winnings to fund our treasury and support onboarding new producers and artists onto the platform.
- Delegation of feature work, peer reviews, code style guidance, and mentorship through engagement with open source engineers being paid through Coordinape and a the Harmony zkDAO, which consists of engineers that graduated with me during Zero Knowledge University, a Harmony-backed program.
- I have been responsible for building both the frontend and backend for the web application, the Solidity smart contracts, as well as oversight onto technical decisions for the project. This will be an ongoing project.
- Tech Used: IPFS, Solidity, Next.js, React, MongoDB, Jest, Python, Semaphore, ZK Proofs, Github

Charter Communications Senior Design Technologist

Aug 2021 - Jun 2022 · Greenwood Village, CO

- Providing technical insight and engineering support on the core design systems team. We author and make design decisions that impact the entire suite of Spectrum products at Charter, and I build the tech around it. I owned the development and direction of a new technical documentation site outlining the design system principals and the implementations of them across the frontend JavaScript framework implementations of it, written in TypeScript and Vue 3. I also optimized the web performance and accessibility of our design system component libraries and help shape the developer experience for all product engineers utilizing our components across React, Angular, Vue, and vanilla JavaScript component libraries.
- This role was a good mix of technical development and interfacing with the developers that were consuming the libraries and design tokens that we created, how to use them, which ones to use based off of specificity, and how to implement the libraries into their existing Angular, React, Vue, or vanilla JavaScript applications, including TV.
- Tech Used: TypeScript, Vue3, React, Angular, VuePress, Sass, Gitlab, Docker, Kubernetes, AWS, Jira

SKILLS

Programming Languages

JavaScript, TypeScript, Solidity, C#, Go
SQL, GraphQL
HTML, CSS, YAML, XML

Frameworks & Tooling

Foundry, Hardhat, Viem, Wagmi, Ethers.js, Web3.js
Slyther, Echidna, Mythril, Certora Prover
Chainlink, IPFS, Infura, Alchemy, The Graph
.NET, Node, Express, MongoDB, Mongoose, Apollo, Expo
React, Vue, Next.js, Nuxt.js, Redux, Zustand, React Native
Jest, Mocha, React Testing Library, Enzyme, Cypress
Docker, Kubernetes, AWS

Certifications

Certified ScrumMaster
ScrumAlliance Certificate ID #355624

Education

SeedPaths
Aug 2014 - Oct 2014 · Denver, CO
8-week intensive software development bootcamp
learning full stack, object-oriented programming in
C#, .NET, JavaScript, jQuery, HTML, CSS, SQL, Git

Louisiana State University
Aug 2008 - May 2011 · Baton Rouge, LA
Landscape Architecture & Communication Studies
Learned AutoCAD, Photoshop, InDesign, & Illustrator

Entrepreneurial

Althea Web Services, LLC
Jun 2016 - Present · Denver, CO
I'm the sole proprietor of this business, primarily set
up for freelancing, consulting, and liability protection

Polyecho Labs, LLC
Feb 2022 - Dec 2022 · Denver, CO
Incorporated the LLC in regards to Arbor Labs with
two other co-founders in a general partnership in
efforts to raise funding and deliver digital products

Architect of the Capitol Senior Full Stack Engineer

Sep 2020 - May 2021 · Washington DC (Remote)

- I came into an existing monolithic app migration that is used once every US election cycle (two years) from .NET 4.x to .NET Core 3.x and had adapted into a new team that was unfamiliar with the app's use case. Since I worked on the app previously, I possessed all the historical knowledge and context and provided insight to the team on data relationships, why decisions were made around code architecture, and to clarify expected application use cases. (Please see older experience below)
- I helped speed up future schema migrations by writing many different SQL scripts to be used for every election cycle in the future for easier migrations, since congressmen and congresswomen could rotate in or out of office.
- I had a direct impact on the onboarding process for new hires and developers across the broader organization new to the codebase, by authoring all documentation for the new front end architecture and defined best practices and principles to follow.
- I impacted the efficiency of stakeholder feature demos and QA testing by creating SQL scripts to mimic specific application states, which were used by both developers and QA for testing bugs and setting up feature demos, resulting in a more seamless workflow and a happier client during demos.
- I optimized and improved the code quality by owning the rewriting of the client application from an MVC view-based approach to a SPA and upgraded to React 16.5, rewriting all class-based components to functional components with hooks, implemented the Context API for global storage and authored over 330 individual tests across 110 test suites to reach 80% code coverage. This gave me the opportunity to catch all my oversights and apply newfound knowledge in React I gained over the years.
- Tech Used: .NET, C#, SQL, React, Jest, SignalR, Hangfire, React Testing Library, Sass, Bootstrap, ESLint, Prettier, Team Foundation Server

Gloo Senior Frontend Engineer

Jun 2019 - Sep 2020 · Boulder, CO

- I worked on the Accounts/Registration team for onboarding new users and organizations registering with the Gloo platform. We solved the problem for tracking where a new user's external origin was, and through logic, determining their proper destination to be, scaling for an SSO model across the platform's host of products. Our UIs had a direct impact on every user, optimizing the conversion rates for successful registrations through efficient user flows, registrations, password resets, verification codes via email, etc.
- As the only full-time employee web engineer on our team, I was responsible for ensuring our Gloo Web team policies and practices were being upheld through code reviews, guidance, and patience.
- I contributed to the internal Gloo Web team by authoring two NPM packages to implement custom Google Analytics and Facebook tags within our Next.js applications.
- I sped up our onboarding process for web contributors by spearheading a Naming Conventions Best Practices doc on front end code for React, Apollo GraphQL, Rosie, Jest, Next.js, etc. authoring it, coordinating with team members for input, and getting everyone to sign off on it, which we later adopted and included our onboarding docs for new hires or contractors.
- Tech Used: Typescript, Next.js, Apollo GraphQL, Node.js, Express, CircleCI, Heroku, Docker, Kubernetes, Jest, Cypress, React Testing Library, Material UI, Formik, Rollbar

Architect of the Capitol Full Stack Engineer

Mar 2018 - Jun 2019 · Washington DC (Remote)

- **Project - Compass**
 - I led the front end development during a redesign of the internal SharePoint intranet for employees about organizational news, events, and other important information.
 - I optimized and reduced the time and stress for content creators within the organization by planning, developing, and launching an internal tool for creating custom SharePoint content, catered to the site. This was used by internal employees that were responsible for creating events, promotional articles, image uploads, etc within Compass.
 - I helped mentor other team members on pieces of code / development concepts when the time was needed.
- **Project - Senate Suites**
 - I owned the client application development during an enterprise app redesign in .NET, migrating from an MVC architecture with views written in Razor to views written in React.
 - I leveraged Redux for state management and Webpack for modular bundle sizes, ensuring only proper bundles were loaded for relative pages within the app.
 - I ushered in and implemented a testing strategy in Jest and Enzyme, resulting in a test coverage of 78% of all client code. Previously, there were no tests implemented at all.
 - I supported migrating features from ColdFusion into .NET, and implemented WebAPIs for a RESTful approach, resulting in a faster and less buggy app.
 - I worked directly with stakeholders of the project, organizing and planning feature work, tech debt, and long term trajectory, while building up client communication skills.
 - Tech Used: C#, .NET, SQL, React, TypeScript, Redux, Jest, Enzyme, jQuery, SharePoint, CAML, Webpack, ESLint, Less

Evolver, Inc. Full Stack Engineer

Apr 2017 - Mar 2018 · Centennial, CO

- I dramatically improved the user experience for over 10,000 users by optimizing client code and refactoring a .NET MVC web app with jQuery to using React and Redux. I brought in shipping confidence for the app and improved our deployment pipeline by implementing a testing harness in Jest and Enzyme covering over 75% of client code, configuring linting with ESLint and formatting with Prettier for overall code quality.
- Tech Used: C#, .NET, React, ES6 JavaScript, CSS, Sass, Webpack, Redux, Jest, Enzyme, Prettier, Jira, jQuery

Crawford & O'Brien Lead Web Developer

Sep 2015 - Apr 2017 · Tempe, AZ (Remote)

- I served as the lead developer for a digital marketing agency performing any and all tech related tasks for over 40 clients, including but not limited to: development of WordPress and Shopify sites with custom themes, continued client support requests, DNS and content migrations, emails, security, backups, site speed optimizations, SEO, etc.
- I built up personal communication skills by working directly with the clients to find out their needs and accomplishing the tasks needed to meet those. I was the main point of contact for direct requests for their websites, and I interacted with them on a 1:1 basis.
- As our department lead, I directed and managed 3 junior developers by delegating tasks and implementing, documenting and overseeing our processes of web development.
- Tech Used: WordPress, PHP, Shopify, HTML, CSS, JavaScript, Google Analytics, WooCommerce, Yoast SEO, Trello

Access Now Web Developer / Designer

Dec 2014 - Aug 2015 · Greenwood Village, CO

- As a contributor, I designed and built dynamic, responsive websites and custom logos and marketing materials for a digital marketing agency. I worked directly with clients.
- Tech Used: WordPress, PHP, HTML, CSS, JavaScript, MySQL, cPanel, Plesk, Adobe Photoshop, InDesign, and Illustrator