

## SUMMARY

Engineering leader with extensive experience in start-ups, serving various key roles in software and product development.

Advanced expertise in TypeScript and Node.js, with experience across frontend, backend and infra.

Demonstrated skill in architecting applications, researching emerging tech, and improving the developer experience.

Enjoyer of Cloudflare Workers.

## SKILLS

### Languages

TypeScript, JavaScript

### Frameworks

Next.js, Remix, Nest.js

### Frontend

HTML5, CSS3, React, Urql, Apollo Client, Tailwind CSS, D3, Recharts, Framer Motion, Storybook, Radix, Shadcn/UI, Slate, Prism

### Backend

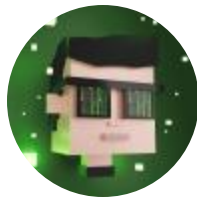
Node.js, Serverless, Cloudflare Workers, D1, Postgres, Drizzle, Redis, GraphQL Yoga, Pothos, Hono, Express, Socket.io, tRPC, Lucia, Better Auth, OpenAuth, AI SDK, OpenRouter

### Tooling + Services

Linux, Mac, Git, VSCode, Figma, pnpm workspaces, GitHub Actions, AWS, Cloudflare, Vercel, Pulumi, CDKTF, Terraform, Turborepo, Docker, Google Analytics, Sentry, Changesets, Playwright, Vitest, Octokit, Stripe, Twilio

### Concepts + Misc.

SEO, A11y, I18n, SSR, CSR, ISR, SSG, PPR, IaC, JWT, Atomic Design, Authorization, Lighthouse, Lazy Loading, PubSub, DB Normalization, DB Sharding, Caching, Rate Limiting, IP Blacklisting, CRDTs, Windowing, Concurrency, Monorepos



## David Lee

Staff Software Engineer / Engineering Lead

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<> pluv.io

## PROFESSIONAL EXPERIENCE



### pluv.io

*Founder*

Aug 2022 - Present

- Built real-time, type-safe packages for Node.js, Cloudflare Workers, and React, supporting authentication, rooms, custom events, awareness, presence, and CRDT storage (with yjs and loro-crdt).
- Built a platform for deploying real-time infrastructure to Cloudflare's edge network via lambdas that cloned and built GitHub repositories, and used Wrangler to deploy Workers and Durable Objects, HTTP-streaming the CLI outputs to the frontend (using GitHub webhooks, Terraform, AWS (ECR, S3, Lambda), QStash, and Cloudflare (Workers, Durable Objects, D1)).
- Added E2E tests with Playwright, simulating runs on singular and distributed Node.js servers and Cloudflare Workers.
- Pivoted to a real-time API SaaS, by generating secure API keys and tracking billable usage with Cloudflare Analytics Engine.
- Did developer outreach, product development and marketing to create interest, get an initial user base and generate revenue.



### KarmaSuite

*Staff Engineer / Engineering Lead*

Mar 2023 - Present

- Architected and built the bulk of the initial KarmaSuite application as the 1st engineer (using Next.js, Turborepo, Tailwind CSS, tRPC, prisma, and Storybook), including an atomic design system with Radix UI.
- Unified and integrated 3rd party accounting APIs (e.g. QuickBooks, NetSuite, etc.) to ETL pipelines so that data can be written to and from KarmaSuite.
- Significantly improved performance of SQL by unifying and denormalizing multiple database tables to support more performant bulk reads and writes of tens of thousands of rows in crons and long-lived background tasks.
- Invented a highly performant algorithm to allocate tens of thousands of expenses to restricted funding sources that minimizes wasted dollars for non-profits using partitioning, set theory and hot-swappable heuristics for an A\* algorithm.
- Created and reviewed numerous PRDs, RFCs and TADs for the engineering org.



### Openbase (shut-down)

*Staff Frontend Engineer*

Apr 2021 - Feb 2023

- Proposed then executed a migration strategy to port the app from a SPA-Parcel app to Next.js, Apollo, Styled-Components, Storybook and Codegen.
- Improved web vitals, a11y and SEO to boost Lighthouse scores from <20 to >90.
- Created an Algolia-Apollo interoperability module to power Openbase's search, that populated @apollo/client's normalized cache, compatible with Next.js SSR.
- Authored an a/b + split-testing framework that integrated with Google Analytics and Amplitude that segmented users by percentage or special conditions.
- Created serverless functions to reroute traffic from old sites and generate custom README badges with metrics from Openbase for package maintainers.
- Significantly improved complex data-grid performances through windowing and minimizing re-renders via memoization and careful opt-outs of state updates.

## PROFESSIONAL EXPERIENCE



### MakePurple

#### *Website Project*

Sep 2021 - Apr 2022

- ▷ Built with Next.js, NextAuth, Prisma, Nexus, Apollo Server, TailwindCSS, Urql, Storybook, PlanetScale, Upstash, Octokit, Pnpm workspaces and Turborepo.
- ▷ Authored an internal CSS-in-JS library for emails in React, a rich text editor with Slate, heat-maps with Visx, a type-safe GraphQL client for Octokit, and more.
- ▷ Improved accessibility with support for screen-readers and keyboard navigation with Radix and Headless UI.
- ▷ Implemented GraphQL for: activity feeds, GitHub operations, file uploads, friend suggestions, real-time chat, notifications, and comments with Nexus + Prisma.



### Toastel (shut-down)

#### *Senior Full Stack Engineer*

Jan 2020 - Mar 2021

- ▷ Designed in Figma, and created an atomic design system without using any ui-toolkits, while improving accessibility and minimizing client bundle size.
- ▷ Authored an internal charting library with Visx, a data-grid library with React-Window, responsive emails with Mjml, animations with Framer-Motion, and more.
- ▷ Created several GraphQL-Nexus plugins to rate-limit fields, validate inputs, and prevent malicious queries with complexity and depth limits.
- ▷ Coded over 300 components and 400 stories on Storybook, with snapshot tests.
- ▷ Achieved 95-100 on all Google Lighthouse metrics (excluding PWA).
- ▷ Implemented JWTs with refresh-tokens, blacklists and retries with Redis + Apollo.
- ▷ Implemented GraphQL for: full-text search with Algolia, emails with Nodemailer, subscriptions and payouts with Stripe, presigned URL uploads with S3, localized timezones with Google Maps, and CRUD with Nexus + Prisma.



### Onfleet

#### *Senior Full Stack Engineer*

Jan 2019 - Jan 2020



### Outward (acquired by Williams Sonoma)

#### *Senior Software Engineer*

Jan 2018 - Jan 2019



### Bosera Funds & Newport Asia

#### *Software Engineer*

Jun 2015 - Dec 2017