As a multidisciplinary engineer I transform concepts into reality. With experience on founding teams, I excel at rapidly validating ideas and crafting rich, web-based tools that solve real user problems. I thrive in small, motivated teams where I can help shape product strategy and drive results.

Skills

- UI Engineering
- Product Design
- Concept Development
- Rapid Prototyping

- Frontend Development (React, TypeScript, CSS)
- WebGL Development (Three.js, React Three Fiber)
- Fullstack Development (TypeScript, Go, Python, Postgres, Redis)

Experience

Member of the Technical Staff, Perplexity — perplexity.ai

2025 — now

Working on making the search experience richer as part of the Agent Experiences team.

Software Engineer, Visual Electric — visualelectric.com

2025

Helped shape the next generation of creative tools. The team joined Perplexity as part of an acquisition deal.

- Was part of 12 major public feature releases including a major agentic reimagination of the product experience.
- Redesigned and owned the critical job queuing system at the heart of the platform.
- Prototyped spatial video editing interfaces and ways to make editing video on the web feel as light as editing an image.

Co-founder CTO, Flexhouse — flex.house

2024

Flexhouse aimed to empower home-owners to be active participants in the design process of their home.

- Led the engineering efforts and leveraged React Three Fiber/Three.js to build a new type of residential architecture design tool.
- Developed a series of prototypes to explore interactions and communicate the concept of a game inspired design tool that is both fun and produces accurate construction plans.
- Implemented algorithms for planar graph region detection, polygon boolean operations, path expansion and more.

Founding Product Design Engineer, re:collect — re-collect.ai

re:collect aimed to help knowledge workers maximize the value of the content they consume.

- Led the zero-to-one creation of an automated knowledge management platform.
- Created a browser extension that automatically collects content based on attention metrics.
- Created a web-based infinite canvas ideation tool, leveraging machine learning to surface insights seamlessly and support creative flow.
- Developed and evaluated experimental user interfaces, collaborating with users to gather insights that shaped product direction.

Senior Product Design Engineer - Core Product, Whereby — whereby.com

2019 - 2021

Whereby aimed to be the easiest way to connect over video.

- Played a key role in rebuilding the web meetings client as a modern responsive React application, owning the room layout and animation engines.
- Led design for major features, including <u>Picture-in-Picture</u>, the <u>XL Room experience</u>, and Breakout Groups.
- Conducted user experience interviews in collaboration with research team to gather insights and improve usability.
- Shaped and articulated the core product vision to stakeholders, focusing on user needs and strategic goals.
- In my time there the team grew from 22 to over 150, revenue 6x and served millions of customers daily.

Contract Developer, Various Clients

2016 - 2019

- Built an interactive storytelling experience for Hyperakt: America Off Balance. They went on to call it "one of the most elaborate things we've ever built". The project was nominated for 2019 Webby Awards. I gave a talk about the project at React Rally 2019.
- Worked with Weav Music to implemented new features in their iOS running app: Weav Run.
- Prototyped an on demand parking service for Jaguar Land Rover and EY.
- Helped Tech City UK to build out new plugins for their web based learning platform.

Founding Product Design Engineer, Swipe — swipe.to

2014 - 2016

Swipe aimed to bring presentations to the web.

- Designed version 2 of the product and led the migration from Backbone to React.
- Prototyped new features for an innovative real-time, web-based presentation tool.
- Established best practices for design and development while mentoring junior team members.

Early Career 2005 — 2014

Designed and built iOS apps during the App Store's heyday, with over 6 years of experience.

- Co-founded GIF SHOP, an early iOS animation app featured multiple times on the App Store,
 Wired, Gizmodo and more.
- Developed custom content management, learning, and communication platforms for clients during the Web 2.0 era.

Education

Media Arts and Animation BFA, The Illinois Institute of Art — Schaumburg

2005 - 2008

- Hosted workshop: Maxscript for artists, 2008
- Hosted workshop: Web development for artists, 2008
- Participant FJORG! Siggraph 2008
- Best Team Animation ARTimation 2008 Digital Arts Festival
- Visual Voltage (AIGA Student Chapter at ILIS) Webmaster, 2008
- 2nd place 2005 ILIS High School Senior Scholarship Competition
- 1st place 2004 SkillsUSA National 3D Animation Competition