

Katie Adee

Senior Frontend Engineer · Fully Remote

kaa328@nyu.edu · github.com/Kadee80 · katieadee.dev

Summary

Frontend engineer with a decade of production experience and an equally long teaching practice. Joined Opentrons pre-Y Combinator as lead UX and founding frontend, then led a squad of eight engineers, a PM, and a designer on the Protocol Designer and Labware Library used by scientists worldwide. Teaching front-end, mobile, and dynamic web at NYU Tandon since 2015. Returning to industry full-time in a fully remote senior frontend role focused on React, TypeScript, Next.js, GSAP, and design-system craft.

Core Stack & Skills

Languages & Frameworks: TypeScript, JavaScript (ES2015+), React, React Native, Redux, Next.js, Node.js, HTML5, CSS3, Sass, CSS Modules

Animation & Interaction: GSAP, ScrollTrigger, SplitText, Canvas, SVG, WebRTC, Framer Motion

Design & Systems: Component libraries, design tokens, accessibility (WCAG), Figma, Adobe CS (Photoshop, Illustrator, InDesign)

Tooling & Platform: Webpack, Vite, Electron, Git, CI/CD, Jest, React Testing Library, Cypress

Adjacent: Python/Flask, MongoDB, PhoneGap/Cordova, Processing, Arduino, openFrameworks, Unity

Leadership: Squad lead (8 engineers + PM + UX designer), hiring, mentoring, curriculum design, code review culture

Experience

Adjunct Professor, Front End Web Development

NYU Tandon School of Engineering

2015 — Present

Teach semester-long, four-hour biweekly courses in Front End Web Development, Mobile Applications, and Dynamic Web.

- Designed and maintain curriculum covering UI/UX, HTML5/CSS3, CSS frameworks, flexible media and media queries, and JavaScript libraries including React and React Native.
- Mentor students through full project lifecycles—architecture, code review, debugging—transferring engineering habits built at Opentrons.

- Continuously update coursework to reflect current industry practice: modern React patterns, TypeScript, accessibility, testing, and build tooling.

Senior Software Engineer / Squad Lead

Opentrons

2015 — 2022

Joined pre-Y Combinator as lead UX and founding frontend engineer. Transitioned into Senior Software Engineer and squad lead as the company scaled.

- Led a squad of eight engineers, one product manager, and one UX designer building the Opentrons Protocol Designer and Labware Library—tools that let scientists design, edit, and share lab protocols without writing code.
- Owned the frontend redesign of the liquid-handling robot calibration interface and all user-facing web applications on a stack of Webpack, Electron, CSS Modules, React, and Redux interfacing with a Python API that generates and executes scientific protocols on Opentrons hardware.
- As founding designer/engineer, produced the brand, marketing site, product UI, and all supporting graphics that carried the company through Y Combinator and into product-market fit.
- Hired, mentored, and handed off ownership of opentrons.com to a junior developer assigned to the Marketing Department.
- Partnered with firmware and robotics engineers to translate hardware state into clear, approachable interfaces for non-technical scientists.

Resident Research Fellow

NYU Interactive Telecommunications Program

2014 — 2015

- Coordinated training workshops, office hours, and help sessions for current ITP students.
- Continued thesis research: a citizen-science mobile application built in coordination with the NYS DEC and Brookhaven National Laboratory's "A Day in the Life of the River" program.

Freelance PhoneGap App Developer

Office for Creative Research · The Wild Bird Trust

2014

- Built a wildlife-sighting and ethnographic data-recording app used on an 18-day live data expedition into the Okavango River Delta.

User Experience Designer & Web Developer

Apple Core Hotels

2010 — 2012

- Designed, built, and managed new hotel sites across US, UK, and Brazilian markets.

User Experience Designer & Web Developer

William Burke Inc.

2009 — 2010

- Production team for all digital creative work—HTML, CSS, ActionScript, Flash, PHP, Photoshop, Illustrator. Managed outsourced development teams and new accounts.

Adjunct Professor, Architectural Hand Drafting

Queensborough Community College

2007 — 2009

- Taught a weekly three-hour course on architectural hand-drafting fundamentals for the Interior Design Certificate Program.

Education

New York University, Interactive Telecommunications Program

2012 — 2014

Master of Professional Studies, May 2014

HTML5 Audio/Video/Canvas, WebRTC, Node.js, Socket.io; Python, Flask, MongoDB; JavaScript, Leaflet.js, PhoneGap/Cordova; Processing (Java), Arduino, openFrameworks (C++), Unity (C#); Data Representation, User Experience, Nature of Code / Physics Simulations.

Pratt Institute, School of Architecture and Fine Arts

2002 — 2008

Bachelor of Arts in Architecture, May 2008

President's List, 15 consecutive semesters · Graduated with Highest Honors (GPA 3.80) · Two-time recipient of the Army Corps of Engineers Scholarship (recommendation by Dr. Esmet Kamil).

NYU School of Continuing and Professional Studies

2009 — 2010

Certification in Web Development, Fall 2010

HTML, CSS, PHP, MySQL, JavaScript, jQuery; Information Architecture; Server-Side Administration.

Noble Desktop Certified Adobe Training Center

2008 — 2012

Web Design Sequence (Spring 2009) · Best Practices for PHP and MySQL (Spring 2012).

Suffolk Community College, Construction Technology

2024

Construction Methods (Spring 2024) · AutoCAD Drafting, Engineering Dept. (Spring 2024) · Structural Drafting (Fall 2024).