Zachary R. Davis   zackrdavis.github.io

zackrdavis@gmail.com • (973) 220-1607   linkedin.com/in/zackrdavis

Experience

PlusMinus, LA

Frontend Developer (Jan 2017 – Sept 2018) → **Lead Frontend Developer** (May 2020 – present)

- Owned the TypeScript / Next.js frontend of a database-spreadsheet-hybrid made for fluid data entry, millions of records per table, and dozens of options for formatting, sorting and filtering.
- Developed and maintained a Storybook library of 200+ React components.
- Prototyped UI elements and consulted with the design team on technical and UX trade-offs.
- Collaborated with designers to distill Figma sketches into specifications and assignable tasks.
- Interviewed and mentored a junior developer from zero React experience to responsibility for roughly 10% of the component library.
- Assembled frontend tooling and foundational code: Vercel and Chromatic CI/CD, Jest testing, Storybook library, Slack / GitHub / ClickUp / AirTable integrations, and asset intake scripts.

FuiszVideo, NYC / LA

Junior Frontend Engineer (Feb 2015 – Aug 2016) → **Frontend Engineer** (Aug 2016 – Dec 2016)

- Built a React / Express / MongoDB application for creating interactive video ads with objects tagged for position tracking via machine vision.
- Templated interactive ads using Javascript and Jade, with robust performance across different devices and ad-placement networks.
- Automated publication of ads to the MoPub platform, turning a 15-minute manual process into a 10-second script and enabling end-to-end testing of ad templates.
- Ported a Linux / Docker machine vision pipeline to MacOS, increasing the number of developers equipped to work on the product's core computer vision technology from 2 to 8.

Access Intelligence, NYC

Frontend Developer (Apr 2014 – Feb 2015)

- Developed a custom WordPress theme for scroll-triggered animations using jQuery and GreenSock.
- Planned and coded an Angular application for browsing the winners of a magazine-industry awards program with 47 distinct categories.
- Wrote an internal-use PHP application for sharing documentation and ensuring that requests to the web-development department included all required information.

Projects

museumofus.org, for the Museum of Us, San Diego

Mar 2022 – Sept 2022

- Rebuilt the museum's website with a Sanity CMS backend and a statically-generated Next.js frontend, which reduced hosting costs by a factor of 5.
- Improved Lighthouse-assessed scores for accessibility (+9%), best practices (+17%), SEO (+8%), and performance (+45%) as compared with the former website.
- Collaborated with museum staff and designers to establish and meet content requirements, including 9 unique page templates and 12 different content-blocks.

Robot Actor for the New York City Players, NYC

July 2017 – Feb 2018

- Designed, fabricated and programmed a robot actor with movement and vocal cues triggered by WiFi+webSocket, a gimbal-mounted camera that tracked actors using infra-red, and an onboard TensorFlow network for generating prose.
- Added functionality in parallel with the client's writing and rehearsal of the play, which required rapid and creative execution of new features.
- Established a maintenance and spare-parts routine that carried the robot through 32 performances in the US and Europe.

Education

The Recurse Center, Participant, NYC / remote

Jan 2023 – Mar 2023

- Created a demonstration Entity-Component-System architecture in TypeScript, suitable for small games or simulations, and delivered a presentation on the structure and uses of the ECS pattern.
- Trained ProGAN and CGAN deep-learning models on transparent PNG images and MNIST handwriting data using Python, PyTorch, and NVIDIA GPUs.
- Wrote use-onnx-web, a React hook abstracting over ONNX.js, to bring client-side inference into a React app in 5 lines of code.

University of Washington, MFA, Photomedia, Seattle, WA

Wesleyan University, BA, English / Art Studio, Middletown, CT