Matt Nichols

Software Engineering • Prototyping • Front-End • Interactive Multimedia

Jul '17 - Present

Meta Creative Coder

- Hybrid design/eng role on the Sound Design team, advancing IC4 to IC6 (staff).
- Designing, building, and shipping augmented reality experiences, focusing on sonic interactivity (processing mic input, generating audio & musical output).
- Developing internal prototypes, exploring new interactive multimedia design patterns (via Svelte, P5.js, Web Audio, MediaPipe, Spark AR, Max/MSP, Colab).
- Guiding roadmapping and design sprints on partner engineering teams.
- Driving brainstorming, and mentoring my design colleagues in technical work.
- Speaking at Abbey Road Studios, an AES conference, and GameSoundCon.

Aug '16 - Jul '17

Facebook Software Engineer

- Built extensible infrastructures for live video processing in both a native iOS runtime, and in a cross-platform AR engine (Objective-C, C++, OpenGL).
- Designed and implemented multiple video filters (OpenGL / GLSL).
- Built out audio effect support in an AR creation tool for MacOS (Swift).
- Improved performance & UX in the Facebook in-app camera (Objective-C).

Oct '15 - Jul '16

Eyegroove Software Engineer

- Built a video creation tool & social app as one of three iOS engineers (Swift).
- Projects included: a fully-featured direct messaging experience, a framework for purchasing premium tools, perf & stability work, and creating video filters.
- Other work included: configuring our JIRA instance, instituting an agile 2-week sprint cycle, and implementing code review standards for our iOS team.

Jul '13 - Oct '15

Twitter Software Engineer

- Focused on onboarding as an iOS engineer on the Growth team (Objective-C).
- Projects included: app-wide phone number integrations for network-building and account security, a framework for alerts and user education, and a full rewrite of our sign-in and user onboarding flows.

2009 - 2013

Brown University B.S. Computer Science

- Bachelor of Science in Computer Science, additional focus in Creative Writing.
- Undergraduate TA for CS15 and CS16 (Intros to Object-Oriented Programming and Algorithms & Data Structures). Head TA for CS168: Computer Networks.
- Summer internships at Microsoft (PM; 2011) and Twitter (Engineering; 2012).