

JOHN SULLIVAN

johnsullivan.pem@gmail.com • johncs.com

Shmeppy – Lead Software Engineer & Founder

2018 – Present

- Built a map editor from end-to-end using Node.js, React, TypeScript, and the Canvas API with multi-user collaboration supported via [operational transformation](#) and WebSockets.
- Developed analytics pipelines in Python and Rust which processed 500M logs daily and accurately predicted the results of the launch of premium accounts.
- Optimized the onboarding funnel to attract 27K users who built 80K maps.
- Built an entire subscription system on [Stripe Elements](#) to support 800 active subscribers.

Khan Academy – Senior Software Engineer

2016 – 2018

- Led a team of five to display different content libraries to users in various locales. Onboarded other Senior Engineers and conducted end-user interviews and high-level design.
- Architected new in-house editing system for an internationally distributed team of content creators that tightly integrated [Crowdin](#) with our React, Python, Flask, and Google App Engine powered editing platform.
- Proposed, designed, and co-built a [Selenium](#) end-to-end testing system.

Khan Academy – Software Engineer

2014 – 2016

- Built the React frontend for the launch of Official SAT® Practice, led a team of four to lay a foundation for new test prep products, and was promoted shortly after.
- Championed adoption of [Flux](#) (later [Redux](#)) across the company.
- Created [Khan Academy's original engineering blog](#) and encouraged contributions to it.

Mozilla – Software Engineer Intern

2014

Decreased DNS lookup latency on all Mozilla products by leveraging OS caches (using C++).

Khan Academy – Software Engineer Intern

2013

Rebuilt their search engine reducing indexing latency from days to minutes and improving engagement.

JetHead Development – Software Engineer Intern

2012 and 2013

Rebuilt the entirety of their closed captioning systems, drastically improving their products' reliability.

John CS Development – Software Engineer (Part-Time Contracts)

2007 – 2013

Completed over 20 contracts including building [ColorTrack Realtime](#)'s desktop interface and a CMS for a senior community home broker with C# and WPF, and a ribbon toolbar with RTL language support with VB6.

Additional Experience

- Taught C++ and Python as a Supplemental Instructor at the [University of California, Riverside](#).
- Co-founded [Galah Group LLC](#) and built a product with MongoDB, Flask, and OpenVZ containers.