

– EXPERIENCE –

Google – Senior Software Engineer – New York, NY & Mountain View, CA

2024-present: Tech lead for drive.google.com PDF editing features including form filling. Championed high-value software engineering principals around testing, modernizing UI architecture, ownership, architecture and roadmapping complex dependencies between projects to deliver the highest value to users.

2018-2024: Tech lead on multiple photos.google.com projects: launched the image editor redesigned on WebAssembly to share the native C++ in-browser ML image processing stack with mobile platforms, rewrote in a data-reactive UI and iterated to ensure performance goals were met for millions of users with a high quality UX. Previously worked on many individual projects, including creating a client reliability measurement framework, leading the web sharing team's launches, engineering and designing the memories API layer including the full frontend for the story player with Google's technologies. Presented a recruiting tech talk about reliability at a Google Sandbox San Antonio event.

2017 SWE Intern: Engineered Live photos playback on Google Photos web (TypeScript, Java).

2016 SWE Intern: Built a full-stack feature (C++, Java, Web UI) for Google Photos in the Geo department.

Microsoft – Software Engineering Intern – Redmond, WA

2017: Designed & implemented XAML and C++ features in Microsoft Edge.

2016: Worked on prototyping new Microsoft Edge features with JS and C++.

2015: Designed & implemented ASP.net services utilizing several Azure services on the Dynamics CRM team.

Bryx, Inc. – Software Engineer – Rochester, NY

2014-2016: Created a real-time user & asset management portal in Angular.js, Bootstrap, API design. Built a Google Maps and Leaflet.JS data visualizer for first responders and dispatchers so that they can respond to 911 alerts quickly.

The Green Team Home Selling System – Lead Web Developer – Warwick, NY

2011-2016: Designed and developed a responsive, single-page real estate search engine and SSO portal. Created a custom PHP MVC framework with client-side routing in JavaScript and a Google Calendar/Contact Sync for SugarCRM.

Blue Buckle Marketing – Web Developer – Chester, NY

2011: Created public-facing websites on Wordpress for local companies including SEO & marketing work.

Onion House Productions – Self-owned freelance web developer – Florida, NY

2008 - 2010: Designed websites for businesses, negotiated with clients, deployed and maintained sites.

– PROJECTS –

Fourier Visualizations, an interactive audio-visual wave simulator – bgrawi.com/Fourier-Visualizations

Built with HTML5 Canvas, WebAudio APIs, Material Design, and Fourier's theorems.

JSFLAP, a web-based finite state machine designer and simulator – jsflap.com

Written in D3.js, TypeScript, and Foundation to create a more user-friendly "JFLAP" replacement.

CSH "ScheduleMaker" Frontend, a scheduling tool used by 10k+ RIT students – schedule.csh.rit.edu

Redesigned the frontend of a popular RIT schedule creation tool with Angular.js, Bootstrap, and more.

Commit Guru, a commit analyzing system, a research project with Dr. Emad Shihab – commit.guru

Created a Node.js web application (Sails.js/Socket.io/Angular.js) that predicts bug-inducing commits based on their contents, co-authored published paper for the ESEC/FSE 2015 conference.

– SKILLS –

Language expertise

TypeScript/JS, HTML, CSS, UI/UX Design.

Platform experience & language familiarity

Java, C++, MediaPlayer, TFLite, Angular.JS, MySQL, React, Node.js, Git, PHP, Swift.

Software engineering

System architecture design, Mentorship, Project management, Detailed design docs, Unit & integration testing, Experiment design/analysis.

– EDUCATION –

Rochester Institute of Technology

2018: Software Engineering B.S.,

Summa Cum Laude, 3.8 GPA.

Received Outstanding Undergraduate Scholar Award, member of the Computer Science House.

– HOBBIES –

Skier, Sailor, Hiker, Eagle Scout (2013)

Percussion & Music production.