

## EXPERIENCE

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- **Soomo Learning** Asheville, NC (Fully Remote)  
*Software Engineer* Nov 2020 - Present
  - Led front-end development using **TypeScript + React**, with full-stack development in **Ruby on Rails** and **Next.js**
  - Orchestrated major tech stack modernization: migrated from Create React App, Webpacker, and CoffeeScript to **TypeScript, Vite, and SWC**, reducing build times by 4-10x
  - Developed and integrated AI chat component supporting OpenAI and Anthropic LLM platforms
  - Led development team in implementing **WCAG 2.2 AA** compliance for accessibility improvements company-wide
  - Improved user experience and performance by reducing bundle sizes by up to **65%**
- **Center for Aphasia and Related Disorders (CARD)** Chapel Hill, NC  
*Contract Software Engineer* Aug 2018 - Nov 2020
  - Designed and developed an iPad app as part of a research study into client-directed cueing for aphasia using **Ionic, HTML/CSS, and TypeScript**.
  - Participated in development and implementation of study protocol, resulting in increase of **29%** accuracy at baseline to **79%** accuracy at conclusion of study
  - Created a command-line tool in **Python** using IBM's Watson **REST/Websocket** API to produce automated judgments of stroke survivors' speech intelligibility
- **UNC-Chapel Hill Center for Cheminformatics Research (CECCR)** Chapel Hill, NC  
*Graduate Research Assistant* Jan 2012 - Jan 2016
  - Developed Chembench ([chembench.mml.unc.edu](http://chembench.mml.unc.edu)), a machine learning and drug discovery platform built using **Java (Tomcat, Struts)**.
  - Led a transition to using **Spring DI** and **Maven** for improved dependency management and maintainability.
  - Developed ChemoText, a data mining platform for discovering connections using the NIH PubMed database, utilizing a **NoSQL** graph database that led to speedups of **>90%** over existing SQL.

## PROJECTS

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- **SanityGone** [sanitygone.help](https://sanitygone.help)  
*Lead Developer* July 2021 – Present
  - Game strategy site initially developed with **Gatsby** and **Contentful CMS** using a **Jamstack** architecture, hosted on **Netlify**
  - Successfully migrated to **Next.js** and **Vercel** hosting to improve performance and developer experience
  - Created a game database site using **Astro** with **React** and **Svelte** components, styled with **Tailwind CSS**
  - Collaborated with UX designers to implement pixel-perfect interfaces from **Figma** designs into production code

## SKILLS

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- **Frontend:** JavaScript/TypeScript, React, HTML/CSS, Next.js, Sass, Svelte, Tailwind CSS, Astro, Gatsby
- **Build Tools:** Vite, Webpack, SWC, Babel
- **Backend & Tools:** Ruby on Rails, Node.js, Git, REST APIs, WebSocket, RDBMSes, Figma, Sketch
- **Infrastructure:** Vercel, Netlify, Heroku, AWS
- **Foreign Languages:** Japanese, Korean

## EDUCATION

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- **University of North Carolina at Chapel Hill** Chapel Hill, NC  
*B.S. Computer Science with Honors, B.A. Linguistics (Phi Beta Kappa, GPA: 3.7)* August 2009 – May 2013
- **University of North Carolina at Chapel Hill** Chapel Hill, NC  
*M.S. Speech-Language Pathology* 2016 – 2018

## INTERESTS

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Linguistics, foreign language learning, cooking, calligraphy