

# Sara Lim Sampson

[LinkedIn](#) • [GitHub](#) • [sarasampson.com](http://sarasampson.com) • [sarasampson.sls@gmail.com](mailto:sarasampson.sls@gmail.com) • San Francisco, CA

## TECHNICAL SKILLS

---

**Languages:** Ruby, Elixir, JavaScript, SQL  
**Web Development:** Rails, Node, Phoenix, GraphQL, REST APIs, Vue, React/Redux, HTML, CSS, Chrome Dev Tools  
**Databases:** RDBMS — PostgreSQL, SQLite3; NoSQL — MongoDB  
**Tools:** Git, Visual Studio Code, Jira, Postman

## WORK EXPERIENCE

---

**Software Engineer, II** July 2020 - Present  
**Synopsys, Inc — Tinfoil Security**

- Developed new features for both internal and external users of the Tinfoil web and API security testing applications
- Designed and implemented GraphQL APIs in Elixir/Phoenix using Absinthe
- Collaborated with team to spec, write, test, debug, and deploy code
- Skills: Ruby on Rails, Elixir/Phoenix, Absinthe/GraphQL, Vue, JavaScript, HTML, Sass

**Staff Research Associate** 2017 – 2019

**University of California, San Francisco — Orthopedic Bioengineering**

- Designed and executed studies examining the role of the cartilage endplate in intervertebral disc health and back pain; published findings in peer-reviewed scientific journals (lead author of 1 article, co-authored 2 articles and 3 abstracts)
  - Sampson SL, et al. Effects of dynamic loading on solute transport through the human CEP. *J Biomech.* 2019. PMID: [30554819](#).
- Improved reproducibility and efficiency of RNA ISH analysis by writing ImageJ scripts to automate 3D image processing
- Successfully developed and validated several new lab methods, including a testing protocol used to determine the rate of nutrient transport through human cartilage under static or cyclic loading with automated fluid loss adjustments

## PERSONAL PROJECTS

---

Portfolio website made with jQuery, HTML5, and CSS3 — *see for further project details* [sarasampson.com](http://sarasampson.com)

**RESONANCE** — *An ambient noise mixer for improving productivity* [Live](#) | [GitHub](#)

- Independently built website from scratch using vanilla JavaScript DOM manipulation, Webpack, npm, HTML5, and Sass
- Optimized site performance on mobile and desktop devices through testing with Chrome Dev Tools and implementing lazy loading; obtained a 100% Lighthouse score for performance, best practices, and SEO
- Leveraged CSS media queries and grid layouts to create a fully responsive design

**SCRIBBLED** — *An online books library inspired by Scribd* [Live](#) | [GitHub](#)

- Skills: *backend* — Ruby on Rails, PostgreSQL, BCrypt; *frontend* — React, Redux, AJAX, CSS3
- Implemented frontend and backend (BCrypt, React Router) authentication measures, allowing only logged-in users to access and make changes to their own reading lists

**CO-HABIT** — *An all-in-one housemates web application built with the MERN stack* [Live](#) | [GitHub](#)

- Skills: *backend* — Node.js, npm, MongoDB, Express, JWT; *frontend* — React, Redux, Axios, Sass
- Designed and built an intuitive user interface for housemates to manage chores, split shared bills, and schedule events
- Implemented chores CRUD functionality and automatic assignment logic that ensures evenly distributed workload amongst housemates; leveraged JavaScript promises to fetch household data and store chores data asynchronously

## EDUCATION

---

**University of California, Berkeley** — B.S. Bioengineering May 2017

Graduated with Honors from the College of Engineering — GPA: **3.75**

- **Recognitions:** Dean's Honor List, Bioengineering Honor Society, Cal Alumni Leadership Award, 2<sup>nd</sup> — Big Ideas in Global Health
- **Activities:** Research Assistant at UCSF, Biodesign Intern, Statistics Lab Teaching Assistant, Artists in Resonance A Cappella

**App Academy** — Full-Stack Software Engineering April 2020