# Jacob Bloom

I'm a fun, energetic, resourceful programmer with a life-long passion for JavaScript, CSS, and TypeScript. I love collaborating with a team, mentoring junior developers, and building systems that are intuitive, well-documented and well-tested. I spent 5 years working with **React** and the **MERN stack** as a **full-stack developer** at <u>Anark</u>.

## Work Experience



Disentangle - iOS App Developer

MAY 2024 - NOW

I am in active development of an iOS physics game.

- · Designed and implemented original game concept.
- Technologies: Swift, SwiftUI, Google AdMob

Anark - Full-Stack Software Engineer III - Apps Team

MAY 2019 - MAY 2024

Full-stack web development with focus on the front-end. My team used **Agile** practices. I was our **TypeScript SME**. Product was a collaborative cloud CMS for CAD content and manufacturing data.

- Built the client side of the File Sharing web application, which facilitates easy upload and organization of technical content using a drag-and-drop file-system UI. This was essential for our pivot to **SaaS**, since previously content could only be published to the platform via a native Windows app, and now it could be done in-browser.
- Built a React **UI Component Library** with dozens of pixel-perfect components for use throughout the web platform. Built exhaustive **Mocha/Jest** test suites.
- · Consumed and sometimes maintained **REST APIs** from a Node/Express.js backend.
- Mentored junior developers and collaborated well with a semi-remote team.
- Designed and implemented a re-skin of the entire front-end.
- Architected and built low-code "TemplateAPI" system, enabling clients to deeply customize the product in a safe, sandboxed environment.
- Built interactive docs for TemplateAPI with live, editable examples.
- Technologies: Node, Express.js, React, TypeScript, Mocha, Chai, Jest, Bootstrap, MongoDB/ Mongoose, Docusaurus, Bootstrap, SASS, Azure DevOps (ADO)

### CU Boulder - ServiceNow Developer

Provided support & custom-built solutions for ServiceNow, CU IT's SaaS issue tracker/ticketing system.

- Built new workflows in this system to replace/improve the IT Department's legacy processes and forms.
- Oversaw development of a Node+Selenium test suite.
- Developed new user onboarding course and videos.
- Technologies: ServiceNow, SQL

## CU Boulder - Student Lead Analyst - IT Service Center

Provided tech support to the CU Boulder campus over the phone, via email, and online.

- Built internal tooling to improve workflows.
- Developed strong customer service soft skills.

SEP 2015 - JUN 2017

JUN 2017 - MAY 2019

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# Education

University of Colorado Boulder (August 2015 - May 2019)

- Bachelor's Degree in Computer Science
- Certificate in Design Technologies

# Personal / School Projects

### Echo.foo()

#### d Echo.foo()

- ▷ new Echo()[0].bar
- ⊲ new Echo()[0].bar

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- An experiment with JS Proxies that runs in the browser console or in the terminal REPL.
  - It creates an Echo object. When you interact with the Echo object, it reconstructs and prints what you wrote, with full syntax highlighting.
  - Technologies: ANSI color codes, Reflection, Proxies, tokenization, Mocha test suite

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## Web-based database for jazz song chord-sheets. Has an interactive song editor and live playback

Notochord

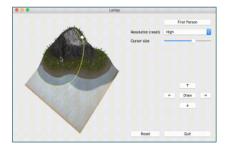
- Has an interactive song editor and live playback.
  Includes a domain-specific language for declaratively describing musical styles.
- Technologies: BNF Parser, MIDI, Interpreters, React, Bootstrap



### Natural Neighbors

- · Agile group project in a Software Development class.
- I was Lead Developer / UI Design.
- Social Network for wildlife enthusiasts to post about animal sightings.
- Technologies: Express.js, Travis CI, Heroku, SASS, Nunjucks templating language

la mejor camino a hacer amigos es a ser una bueno persona



## <u>Liga Diga</u>

 $\cdot$  A generated front that uses ligatures (font symbols that substitute groups of letters) to translate the top 300 words from English to Spanish.

#### Lumpy

- Final project for an OpenGL class.
- Additive landmass editor with a first-person mode so you can move around the world you've made.
- Includes complex mouse interactions, which are hard in OpenGL.
- Technologies: OpenGL, C++, Qt

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## Skills

#### Languages

- JavaScript / TypeScript
- HTML5
- CSS / SASS / SCSS
- C / C++
- Python
- Shell Scripts
- Swift
- SQL

#### **Technical Skills**

- Web Design / Front-End
  - React / JSX / TSX
  - Redux / Zustand / State Stores
  - Web Animations
  - SVG / Canvas
  - Bootstrap
  - jQuery
  - Web Accessibility (WCAG)
  - Responsive Design
- Node.js / Back-End
  - Express.js
  - Mocha / Chai
  - Jest / Testing-Library
  - MongoDB / Mongoose (NoSQL)
- Git / Microsoft TFVC
- GitHub / NPM
- Azure DevOps (ADO)
- OpenGL / WebGL
- SwiftUI
- Regular Expressions
- Interpreters / Parsers

#### Other Skills

- Agile Practices
- Graphic Design
- Photoshop / Adobe CC
- Customer Service
- Music Production
- Jazz Piano