

NICO AROCA

Full-stack Software Engineer | React/Typescript Specialist | Community-Driven Builder

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TECHNOLOGIES

Frontend: JavaScript, TypeScript, React, Next.js, HTML, CSS, Sass, Tailwind CSS

Backend: Node.js, Express, PostgreSQL, MongoDB, C#, ASP.NET

Systems & Tools: Linux, Git/GitHub, Bash, Figma, Postman/Insomnia, Jest

Low-Level/Other: C++, C, OpenGL, SDL, Python, Java

EXPERIENCE

Web Developer (Volunteer) | Hedgehog Technical Institute

(Jun 2025 – Present)

Supports a 300+ member indie-dev community by engineering and maintaining HTI's React/TypeScript platform and event systems.

- Rebuilt routing architecture using React Router v7 with nested layouts and page shells, cutting development time for new event pages by ~40%.
- Shipped UI upgrades and phpBB customizations that improved forum usability and boosted community engagement by 15%.
- Partnered with HTI leads to delivering new event pages (CGS, arcINDIE) and improving mobile UX and visual consistency across the platform.

Career Launch Spark Fellow | The Marcy Lab School

(Apr 2025 – Present)

- Developing communication and behavioral interviewing skills through structured coaching, practice, and feedback aimed at clarity and confidence.
- Working weekly with a career coach on mock interviews, portfolio refinement, and consistent strategies for presenting technical work and approaching interview problems.

Google Software Engineering Program Fellow | Google

(Oct 2024 – Dec 2024)

- Selected for a competitive Google mentorship and received weekly 1:1 guidance from a Google engineer.
- Worked through DS&A problems involving decomposition, algorithm design, and optimized implementations in JavaScript.

Software Engineer Capstone Project Intern | The Marcy Lab School

(Jun 2024 – Sep 2024)

- Built a real-time 3D rendering engine using C++ and OpenGL, designing shaders, buffers, and timing control from scratch.
- Delivered a complete rendering pipeline, from shader architecture to frame timing, under tight project constraints.

PROJECTS

EventXchange | Full-stack Event Discovery Platform

(Jun 2025 – Jul 2025)

- Led front-end development and supported teammates on React components, state management, and project structure during the freeCodeCamp hackathon.
- Built responsive React interfaces with Tailwind CSS and implemented secure CRUD/auth APIs with Node.js and MongoDB.
- Collaborated with a 10-person team to define components, coordinate implementation, and ship a functional prototype under tight deadlines.

prismGL | C++ OpenGL Graphics Engine

(Jun 2024 – Sep 2024)

- Built a lightweight 3D rendering engine applying low-level graphics concepts like shader pipelines, buffers, and draw calls.
- Implemented shader compilation, memory-safe buffer management, and rendering loops with precise frame-timing control.

PEAR | Full-stack App for Accessing Local Enrichment Programs

(Apr 2024 – May 2024)

- Built a full-stack web app with React, Sass, Node.js, and PostgreSQL to help families discover enrichment programs.
- Designed secure authentication flows and a normalized PostgreSQL schema for users, programs, and comments.
- Developed accessible React interfaces and reusable components with Sass, focusing on layout consistency and clarity.
- Led a 3-person team, coordinating tasks, reviews, and feature delivery across iterative weekly sprints.

Breed Guesser | React Front-end Game Suite & Image Search App

(Mar 2024 – Apr 2024)

- Built a responsive React app that integrates an API to dynamically search and render dog breed images.
- Developed multiple interactive games, including a breed quiz, a memory match game, and sliding tile puzzle.

Palette Picker | JavaScript Color Tool

(Nov 2023 – Dec 2023)

- Built an interactive color palette generator using vanilla JavaScript with dynamic UI updates and contrast-checking logic.
- Implemented persistent state using localStorage and designed a clean, responsive layout with accessible controls.

EDUCATION

The Marcy Lab School | Software Engineering Fellowship

(Sep 2023 – Sep 2024)

- Completed 2,000+ hours of full-stack engineering, computer science, and leadership training.
- Built and deployed multiple production-grade apps using React, Node.js, SQL, and modern web development practices.

CERTIFICATIONS

Microsoft | Back-End Development with .NET

(2025)

Google | Technical Support Fundamentals

(2025)

StackRoute | Cloud Computing Micro-Bootcamp

(2025)