NICO AROCA

Software Engineer

nicoaroca.isworking@gmail.com | (929) 365-7845 | Linkedin | Github | Brooklyn, NY, USA

EXPERIENCE

Google Software Engineering Program Fellow (G-SWEP)

(Oct 2024 - Dec 2024)

Google

- Engaged in weekly 1:1 mentorship to deepen understanding of data structures and algorithms.
- Strengthened technical problem-solving and interview skills through structured coaching.

Software Engineer Capstone Project Intern

(Jun 2024 - Sep 2024)

The Marcy Lab School

- Completed a 10-week internship simulating a professional software development environment.
- Developed a graphics application by learning C++ and OpenGL, culminating in rendering a 3D object on screen.
- Demonstrated strong commitment, self-management, and a focus on continuous improvement.

Character Design Intern

(Feb 2023 - Jun 2023)

Creative Art Works

- Created original characters and narratives in a 14-week internship focused on design.
- Collaborated with industry professionals for feedback and career insights.
- Awarded "Most Original Character" within the group.

PROJECTS

PrismGL - C++ OpenGL App

(Jun 2024 - Sep 2024)

A desktop application that displays a 3D prism using OpenGL.

- Developed a lightweight rendering engine using C++ and OpenGL.
 - Implemented a custom rendering pipeline to initialize shaders, buffers, and a rendering loop.

PEAR - Full-stack Web App

(Apr 2024 - May 2024)

An app connecting low-income families with enrichment opportunities.

- Designed and implemented user authentication for account creation and comments.
- Engineered a PostgreSQL database for backend interactions and ensured reliable data storage.
- Built a responsive front end with React and Sass for a seamless user experience.
- Led the team from ideation to completion, facilitating discussions, organizing tasks, and ensuring project milestones were met.

Recipe Wizard - Front-end Web App

(Jan 2024)

A recipe search tool that suggests meals based on available ingredients.

- Leveraged an external API to dynamically fetch and render images and recipes.
- Utilized HTML, CSS, and JavaScript to create static elements like a search bar and recipe cards.

EDUCATION

The Marcy Lab School - Software Engineering Fellowship

(Sep 2023 - Sep 2024)

- Completed over 2,000 hours of coursework in web development, computer science (CS) fundamentals, and leadership development.
- Developed proficiency in HTML/CSS, TypeScript, Python, Node.js, React, and SQL.

TECHNOLOGIES

Web Tech Stack: JavaScript, TypeScript, React, Node.js, Express, PostgreSQL, CSS3, Sass, HTML5 **Other:** C++, C, Python, SDL2, OpenGL, Shell

Tools: Git, GitHub, VSCode, Linux, CMake, Slack, Figma, Aseprite, Postman, Illustrator, Photoshop

LANGUAGES

English, Spanish