

Carlos A. Machin

Software Engineer

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Summary

Software Engineer with experience in full-stack development workflows and focused on delivering high-quality experiences to end-users.

Work Experience

Software Engineer

GE Healthcare, Waukesha, WI

Jul 2023 - Present

- Developed frontend & backend features for a web-based platform using Angular, Typescript, Node, and AWS to improve the lifecycle management of GE Healthcare's products.
- Developed cloud-based services using AWS to enable observability of GE Healthcare's infrastructure.
- Designed and built a web application using Angular and Java to visualize data gathered by CT scanners.
- Developed a portable application using Electron to facilitate field engineer workflows and improve efficiency by 90%.
- Collaborated with various teams of highly-skilled engineers & leaders in agile environments to develop and ship high-quality software at a fast pace.
- Participated in recruiting efforts by interviewing and screening early-career candidates.

Software Engineer Researcher

Bio-Optics Oceanography Laboratory, Lajas, PR

Dec 2021 – May 2023

- Designed and built a web application using React and MQTT capable of communicating remotely with an Autonomous Surface Vehicle and visualizing its captured data across 2D and 3D planes.
- Developed features for an ASV using Python to capture data from ocean floors.
- Led migration efforts to modernize the laboratory's informational website using HTML, CSS, and Javascript.

Software Engineer Intern

GE Healthcare, Remote

May 2022 - July 2022

- Designed and built a web application capable of visualizing Computed Tomography data remotely.
- Prepared and submitted software engineering documentation.

Computer Hardware Intern

EMSYS Design, Guaynabo, PR

June 2019 - Aug 2019

- Performed maintenance on servers by inspecting hardware and software using Linux.
- Monitored company inventory to keep databases updated.

Education

B.S. Software Engineering

University of Puerto Rico, Mayaguez, PR

Aug 2017 - May 2023

- 3.5 GPA
- NCAS-M Fellow

Skills

- **Languages:** HTML, CSS, JavaScript, TypeScript, Python, Java, C++, MATLAB, SQL
- **Technologies:** Angular, React, React Native, Next.js, Vite, Jasmine, Chai, Jest, Playwright, Cucumber, Electron, Node, Docker, Shell, AWS, Figma, Git, Claude, GPT, CI/CD, Powershell, Microsoft Office Suite, Tailwind, Windows, Linux, Mac, Grafana

Projects

Portfolio Website

Personal Project

Jan 2023 – Present

- Developed a personal website using React to document my work history, showcase my research, and display my software projects.

Greenlease

Software Engineering Senior Design Project

Jan 2023 – May 2023

- Architected and built a full-stack web application using React, Python, and SQL to help students from the University of Puerto Rico find rent and lease accommodation near the university.

Email App

Software Engineering Course Project

Aug 2022 – Dec 2022

- Architected and built a full-stack web application using React, Python, and SQL where users can add friends, send emails, edit emails, and see some cool stats.

Solar-Powered Race Car

University of Puerto Rico, Mayaguez, PR

Feb 2020 - Dec 2021

- Developed telemetry gathering techniques for a solar powered race car using C++ .
- Developed an SQL database for storing telemetry data.

Certificates

- HackerRank Java Certificate: <https://www.hackerrank.com/certificates/d8ff64c7897e>
- HackerRank Python Certificate: <https://www.hackerrank.com/certificates/1a504d147973>
- HackerRank JavaScript Certificate: <https://www.hackerrank.com/certificates/177cf9d6cc1c>

Languages

- English (Fluent)
- Spanish (Fluent)