

Juan Sebastian Ballen Castañeda

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Education

UNINPAHU UNIVERSITY

B.S. in Software Engineering.

Relevant Coursework: Algorithm Design and Analysis, Object-Oriented Programming, Data Structures, Software Methodology, Web Back-End Development, Information Systems Modeling

Bogota D.C., Colombia

In Progress

LAKE SUPERIOR COLLEGE

A.S. in Computer Technology.

Duluth, MN

May 2019

Relevant Experience

MAGNETO GLOBAL

Frontend Developer

Medellin, Colombia (Remote)

November 2022 – August 2024

Spearheaded migration from Ant Design to custom React.js/TypeScript component library with Storybook for Next.js application, significantly reducing Cumulative Layout Shift (CLS) and improving Core Web Vitals metrics across the platform. Optimized REST API integrations by implementing Redux Toolkit with RTKQuery, improving data flow and decreasing load times by 20% for key user interactions. Leveraged Docker and MongoDB in development workflow to support seamless frontend-backend integration. Implemented performance optimizations across Next.js application, resolving critical bugs and improving stability for enterprise clients. Collaborated with UX/UI designers to ensure component library met accessibility standards while maintaining visual consistency across enterprise applications.

ARROYO CONSULTING

Frontend Developer

Nashville, TN (Remote)

February 2022 – October 2022

Developed responsive HR platform features with React.js and TypeScript, utilizing Ant Design components and Styled Components for consistent and maintainable UI styling. Implemented multilingual support through i18n integration, expanding platform accessibility to international markets and improving user engagement. Integrated .NET Framework REST APIs using Axios while managing global application state with Redux, creating efficient data flow patterns between frontend and backend systems. Executed Git best practices including branching strategies and conventional commits, fostering collaboration in cross-functional team environments. Optimized bundle size through code splitting and lazy loading techniques, improving initial load times by 15% and enhancing overall application performance.

Leadership & Activities

UNINPAHU UNIVERSITY

Lead Developer, Smart Agriculture Project

Bogota D.C, Colombia

February 2024 – May 2024

Led a team that developed an Arduino-based automated irrigation system prototype using soil moisture sensors, proposing an initial solution to Bogotá's growing water resource challenges. Coordinated programming for intelligent water management while collaborating on designing a scalable architecture intended to evolve into a platform that collects extensive crop data to optimize water usage in agriculture. Teamwork was key to developing both the initial solution and planning future iterations focused on agricultural data analysis through IoT integrations. Our progressive approach to precision agriculture received university recognition during the first semester of 2024.

Technical Skills & Projects

Technical: JavaScript (Advanced), TypeScript (Proficient), HTML5/CSS3 (Advanced), Python (Basic), Java (Basic), C# (Basic), PHP (Basic), React.js (Advanced), Next.js (Advanced), Django (Basic), Redux (Advanced), Node.js (Intermediate), Express.js (Intermediate), Styled Components (Proficient), SASS (Proficient), Git (Proficient), Docker (Intermediate), MongoDB (Basic), SQL (Proficient), AWS (Basic), Postman (Proficient)

Language: English (C1 Advanced), Spanish (Native)

Interests: Mobile Development, Video Game Design, Artificial Intelligence, Web Accessibility, Extreme Sports (Skydiving), Music, Graphic Novels