

OSCAR SANTIAGO VÉLEZ MUÑOZ

Senior Software Engineer | Backend & Full-Stack Development

Cali, Valle del Cauca, Colombia

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Profile

Results-driven Senior Software Engineer with 4+ years of experience specializing in **backend development (Node.js, Python)**, **full-stack solutions (React)**, and **cloud architecture**. Proven expertise in migrating monolithic systems to scalable microservices, developing robust SDKs, and engineering complex data extraction solutions. An accomplished technical leader and university-level educator with a track record of mentoring high-performing teams and driving the adoption of best practices in Agile and DevOps environments. Currently specializing in **web scraping, Python**, and the **Cloudflare ecosystem**.

Professional Experience

Software Architect (Freelance) | ClientFy | Remote Jan 2024 – Present

- Led the successful migration of a monolithic enterprise application to a scalable and optimized **microservices architecture**, improving system performance and flexibility.
- Implemented a robust CI/CD pipeline and DevOps culture, significantly reducing deployment times and enhancing value delivery to end-users.
- Architected and developed backend services using **Node.js** and **NestJS**, ensuring high availability and performance for multiple products.

Frontend Web Developer | Polux Apps | Bogotá, Colombia Jun 2021 – Present

- Developed and maintained responsive, high-performance user interfaces for enterprise web applications using **Vue.js** and modern frontend frameworks.
- Integrated frontend components with backend services via **REST APIs**, ensuring seamless data flow and scalability.
- Deployed, managed, and monitored services on **Amazon Web Services (AWS)**, optimizing for cost and performance.

University Professor | Universidad del Valle | Cali, Colombia Jan 2024 – Present

- Instructed over 1,000 students in foundational and advanced courses on **programming, web development, and software architecture**.
- Designed and implemented academic curricula focused on emerging

technologies, including **AI, cloud computing, and modern development frameworks.**

- Mentored students on complex software development projects, fostering technical skills and best practices.

Educational Supervisor & Lead Developer | Universidad ICESI | *Villa Rica, Colombia*
Jan 2023 – Dec 2023

- Spearheaded the complete lifecycle development of **EdutekaLab**, an educational platform featuring AI-powered tools for teachers, built with **React, Node.js, and MySQL.**
- Led educational initiatives and supervised a key project aimed at improving academic performance through technology.

Technical Skills

- **Backend:** Python, Node.js, NestJS, Express.js, Prisma ORM
- **Frontend:** React, Vue.js, Quasar, JavaScript, HTML5, CSS3, Bootstrap
- **Data & Databases:** PostgreSQL, MySQL, MongoDB, Redis
- **DevOps & Cloud:** AWS, Cloudflare, Docker, NGINX, PM2, CI/CD, Ubuntu
- **Web Scraping:** Proficient in data extraction techniques and tools.
- **Project Management:** Agile, Scrum, DevOps Methodologies
- **Other:** Git, GitHub, REST APIs, Online Payments Integration

Featured Projects

Enterprise Architectural Migration | ClientFy

- **Objective:** Overhauled a legacy monolithic system to improve scalability and performance.
- **Execution:** Led the transition to a **microservices architecture** using **Node.js** for backend services and implemented a full **DevOps** pipeline.
- **Technologies:** Node.js, NestJS, Docker, AWS, CI/CD.

EdutekaLab | AI-Powered Educational Platform

- **Objective:** Develop a comprehensive SaaS platform for educators at Universidad ICESI.
- **Execution:** Built the platform from the ground up, implementing features for lesson planning, rubric generation, and gamification using AI.
- **Technologies:** React, Node.js, MySQL, AWS.

Légein Magazine | Academic Editorial Platform

- **Objective:** Create and manage a digital platform for academic publications.
- **Execution:** Directed the editorial process and developed the web platform,

managing content and user workflows.

- **Technologies:** Content Management Systems, Web Development fundamentals.

Education

- **Specialization in Information Technologies** | Google Creative Campus & Unicafam | 2022
- **Technology in Software Analysis and Development** (Incomplete) | SENA | 2021 - 2023
- **Professional in Philosophy** | Universidad del Valle | 2018 - 2022
- **Bachelor's in Social Sciences & Political Science** | Universidad ICESI | 2016 - 2021