

Juan David Colonia Aldana

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Software Engineer in training with a strong foundation in software development, cloud computing, and distributed systems. Passionate about the intersection of Artificial Intelligence and DevOps practices, exploring how automation and scalable infrastructures can accelerate innovation and reliability in AI-driven solutions. Experienced in collaborative environments through mentoring and group project support, fostering both technical growth and teamwork. Motivated to design efficient architectures, apply AI and automation to real-world challenges, and contribute meaningfully to engineering teams that value innovation, resilience, and continuous improvement.

PROFESSIONAL EXPERIENCE

ICESI University

Academic Monitor

Cali, Colombia

July 2025–Present

- Provided academic support to students in courses such as Algorithms and Programming, Software Engineering, Discrete Structures, Data-Intensive Systems, Internet Computing, Operating Systems, and Project Management, strengthening technical understanding.

ICESI University

Teaching Assistant, Artificial Intelligence I

Cali, Colombia

July 2025–Present

- Supported over 30 students in AI projects by applying CRISP-DM methodology, guiding exploratory data analysis, supervised model training, and deployment of machine learning models through REST APIs.

ICESI University

Teaching Assistant, Integrative Project I

Cali, Colombia

July 2024–Present

- Mentored and guided over 100 students organized into 20+ project teams, each developing a full-stack web application using Python and Django.
- Provided technical and architectural feedback across all project phases, including database modeling, RESTful API design and modular backend logic.
- Reviewed and advised on 20+ Jira boards, ensuring user stories were properly written from the end-user perspective and mapped clearly to development tasks.
- Led GitHub workshops on branching strategies, pull request reviews, commit standards, and collaborative workflows, improving development practices across teams.
- Supervised code quality, testing, debugging, and deployment efforts across all projects, helping students ship fully functional and optimized applications by the semester's end.

ICESI University

Teaching Assistant, Internet Computing I

Cali, Colombia

January 2025–June 2025

- Assisted over 30 students in mastering foundational concepts in Internet computing, including the OSI model, packet inspection with Wireshark, and socket communication.
- Delivered hands-on workshops on RESTful services and client-server models using JavaScript, Express.js, HTML, and CSS, reinforcing real-world application of theory.

ICESI University

Teaching Assistant, Applied Mathematics

Cali, Colombia

January 2024–June 2024

- Provided tailored support for students applying Python to solve mathematical problems involving series, sequences, derivatives, and optimization techniques.
- Developed inclusive teaching strategies for students with disabilities, including mentoring a visually impaired student, enabling him to effectively program in Python using assistive tools.

EDUCATION

UNIVERSIDAD ICESI

Systems Engineering

Cali, Colombia

January 2022–Present

- **Academic Achievements:** Dean's List for seven consecutive semesters (2022-1 to 2025-1). Awarded the Honor and Gold Scholarships by Universidad Icesi, and the Generación E Scholarship by the Government of Colombia.
- **Relevant Coursework:** Software Architecture, Artificial Intelligence, Cloud Computing, Data Science.

TECHNICAL SKILLS

- **Programming Languages:** Java, Python, JavaScript, TypeScript, Kotlin, Bash.
- **Frameworks:** Spring Boot, Django, React, Next.js, NestJS, Express.
- **Databases:** PostgreSQL, MySQL, MongoDB.
- **Cloud & DevOps:** Kubernetes, Docker, Azure, AWS, GCP, Jenkins, GitHub Actions, Terraform, Ansible, SonarQube.
- **Tools:** Git, GitHub, Selenium.
- **Soft Skills:** Communication, Team Collaboration, Adaptability, Leadership, Problem-Solving, Time Management.
- **Languages:** Spanish (Native), English (Intermediate).