

Simón Barrera Ruíz

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Cali – Palmira, Colombia

PROFESSIONAL SUMMARY

Mechatronics Engineering student with a strong track record in technical leadership, international robotics competitions, and applied consulting in Generative Artificial Intelligence. Legal representative and operations coordinator at a last-mile logistics company, founder of an AI-focused corporate training firm, and international mentor in STEM competitions supported by global organizations. Interdisciplinary profile oriented toward the strategic execution of technological solutions, with a strong ability to lead teams, communicate complex ideas, and generate sustainable impact across educational, business, and institutional contexts.

PROFESSIONAL EXPERIENCE

OPERATIONS COORDINATOR & LEGAL REPRESENTATIVE – BaruCourier SAS

Baru Courier – Palmira | 2024 – Present

End-to-end operational and strategic leadership of a last-mile logistics company, with direct responsibility for intercompany coordination, process optimization, and the development of proprietary technological solutions for logistics management.

- Management and traceability of over 25,500 packages per month, through scanning, data systematization, and operational control.
- End-to-end coordination of labeling, sorting, re-dispatch, and operational integration with an external delivery partner.
- Development of proprietary digital tools (BaruLogix) for delivery tracking, operational dashboards, and data-driven decision-making.

FOUNDER & DIRECTOR – SCIBARU AI

Palmira | 2023 – Present

Firm specialized in corporate training and applied consulting in Generative Artificial Intelligence, focused on bridging the gap between theory and real-world adoption of Industry 4.0 technologies in public and private organizations.

- Design and delivery of intensive training programs in Generative AI, combining advanced theory with hands-on workshops using leading platforms.
- Advisory support for organizations in the identification, prioritization, and structuring of high-impact, fast-ROI projects.

- Contribution to the strategic and ethical adoption of AI across public and private stakeholders in the Valle del Cauca region.

WEB & DIGITAL SOLUTIONS DEVELOPER

Independent and corporate projects | August 2024 – Present

End-to-end development of web platforms, digital tools, and technological solutions aimed at optimizing operational, educational, and logistics processes.

- Development of BaruLogix, a web platform for logistics management, traceability, and operational control.
- Creation of corporate landing pages and web platforms for companies and projects such as Eduqualityco.
- Development of web-based solutions for logistics and educational management, aligned with real operational needs.

INTERNATIONAL MENTOR – Team Colombia | FIRST Global Challenge

Fundación Team Colombia | Since 2023

Technical, strategic, and communication mentorship in an international robotics competition supported by global organizations, representing Colombia in high-demand technical, organizational, and diplomatic environments.

- Mechanical design mentor, focused on structural optimization and regulatory compliance.
- Leadership in international relations, communication strategy, and social media management, with global recognitions.

TECHNICAL MENTOR – FIRST Tech Challenge (FTC)

Team Colombia | 2025 – Present

Mentor in the creation of one of the first FTC teams in Colombia, preparing for the country's first national FTC regional in Cartagena (March 2026).

- Leadership in mechanical design, construction, and assembly of the competition robot.
- Technical guidance in manufacturing processes, materials selection, and build strategy.
- Team training aligned with international FIRST standards.

TECHNICAL MENTOR – Stemachines 9087 | FIRST Robotics Competition (FRC)

Yumbo Mayor's Office Project | January – May 2023

Educational robotics project led by the Mayor's Office of Yumbo and executed through Fundación Team Colombia.

- Responsible for the design of chassis, mechanisms, and technical documentation in compliance with FRC regulations.
- Technical mentorship in design, construction, and competitive preparation processes.

CONSULTANT – DIGITALIZATION OF EDUCATIONAL & CULTURAL PROJECTS

Eduqualityco – Ministry of Culture | 2024

Participation in the “Pacífico en su Salsa” project, focused on the digitalization and optimization of educational processes in partnership with the Colombian Ministry of Culture.

- Optimization and structuring of educational content for digital learning environments.
- Strategic support in the implementation of technological tools for educational processes.
- Integration of technology, education, and cultural management.

ACADEMIC MONITOR & UNIVERSITY PEER MENTOR – COMPAS Program

Universidad Autónoma de Occidente | 2024

Academic, emotional, and social support for first-semester students during their university adaptation process.

- Support in academic integration processes and transversal skills development.
- Personalized mentoring with a human-centered and formative approach.

TECHNICAL & AUDIOVISUAL PROJECT ADVISOR

Colegio Bilingüe San José Campestre | Since 2023

Technical and creative advisory for student projects and institutional events.

- Production of audiovisual materials and support in institutional event management.

REFEREE & JUDGE – ROBOTICS COMPETITIONS

MakeX – FIRST LEGO League

Participation as referee and judge in official regional robotics competitions.

- Referee at MakeX (Yumbo): performance evaluation and rule enforcement.
- Judge at FIRST LEGO League (Cali): robot design, FIRST values, and team spirit assessment.

TECHNICAL PROJECT ADVISOR – TECHNOLOGICAL TRAINING

Educational institutions | As applicable

Comprehensive technical mentoring for students in technical programs, focused on the design and development of technological solutions to real-world problems through applied engineering.

- Planning, conceptualization, and design of functional prototypes aligned with clearly defined technical challenges.
 - Hands-on training in electronic assembly, electronics fundamentals, and Arduino programming, strengthening applied technical skills.
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COMPETITIVE PARTICIPATION

- FIRST Global Challenge – Team Colombia (2020–2022)
Student and Competitor in an International robotics competition supported by global organizations.
- National Lead – *Carbon Capture Edition*, Geneva, Switzerland (2022)
 - Ingeniathon – Universidad Autónoma de Occidente (2023, 2024)
- International inter-university innovation competition.
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ACADEMIC BACKGROUND

- B.Sc. in Mechatronics Engineering (In Progress)
Universidad Autónoma de Occidente – Cali
2023 – Present
 - High School Diploma
Colegio Bilingüe San José Campestre
Graduated 2023
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ADDITIONAL TECHNICAL TRAINING

- Generative Artificial Intelligence – PALMUS Ventures (Palmira Chamber of Commerce)
- Prompt Engineering – Google
- Prompt Engineering – Udemy
- 3D Modeling – Universidad Autónoma de Occidente
- Audiovisual Production – FIRST Global

- Innovative Education – Fundación Team Colombia
 - Data Privacy and Protection – FIRST
 - Volunteer Coordination – FIRST
 - Gracious Professionalism – FIRST
 - Emotional First Aid – Universidad Autónoma de Occidente
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AWARDS & RECOGNITIONS

- Top 4 Worldwide – FIRST Global Challenge, 2024
 - 3rd Place Worldwide – Engineering Documentation – FIRST Global Challenge, 2024
 - Top 8 Worldwide – FIRST Global Challenge, 2020
 - International Social Media Recognition – Team Colombia (2022, 2023, 2024, 2025)
 - Academic Excellence Award – Palmira Mayor's Office, December 2023
 - 1st Place – Ingenium Fest, Universidad Autónoma de Occidente, 2025
 - 2nd Place – Ingenuathon, Universidad Autónoma de Occidente, 2024 & 2025
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VOLUNTEERING

- International Volunteer – FIRST Global Challenge 2025 (Panama City)
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TOOLS & SOFTWARE

- Engineering & Simulation: MATLAB, Octave, RStudio, SolidWorks, Onshape
 - Programming: Python, R, Java, HTML, C (Arduino)
 - Electronics: Arduino IDE, Proteus, Multisim, TinkerCAD
 - Development & Multimedia: VS Code, Android Studio, NetBeans, OBS, Premiere
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LANGUAGES

- Spanish: C2 (Native)
 - English: C1+ (Linguaskill)
 - German: A2 (Duolingo)
 - French: A2 (Universidad Autónoma de Occidente)
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TECHNICAL SKILLS

- Design and construction of functional mechanical prototypes
- Applied electronics and embedded systems programming
- Generative Artificial Intelligence applied to real-world processes

- 3D modeling, mechanical simulation, and validation
 - Data management, logistics traceability, and operational visualization
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SOFT SKILLS

- Technical leadership in high-demand environments
 - Technical communication and strategic dissemination
 - Coordination of interdisciplinary teams
 - Mentorship and talent development
 - Complex problem-solving under pressure
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References available upon request.