MATEO VIZCARRA

he/him | Lima, Lima, Peru (open to relocation) | mateovizcarrajimenez@gmail.com | +1 (917) 443-9877 | linkedin.com/in/mateo-vizcarra

—— OBJECTIVE —

Seeking full-time position starting on July 2025 in the construction industry with a focus on structural or water resources engineering

— EDUCATION —

Rensselaer Polytechnic Institute Troy, NY, USA

Bachelor of Science in Civil Engineering (GPA: 2.95)

- Technical Coursework: Steel Design, Concrete Design, Matrix Structural Analysis, Applied Hydrology
- Non-Technical Coursework: Construction Management, Business Management, Financial Accounting, Microeconomic Theory

—— WORK EXPERIENCE ——

LSH Consulting Engineers Lima, Lima, Peru

May 2024 - July 2024

Anticipated Graduation: May 2025

Water Resources Engineering Intern

- Modeled 3D hydraulic structures in AutoCAD, created meshes in SALOME, and ran computational fluid dynamics simulations of multiphase flow in OpenFOAM and SimScale for an agricultural development project
- Wrote a report on the 11,600-mi² watershed's hydrology, hydric balance, sedimentology, glacier retreat, and climate classification
- Developed a manual for current and future engineers to use OpenFOAM in hydraulic engineering projects

Albamar Grupo Inmobiliario Lima, Lima, Peru

May 2023 - July 2023

Construction Engineering Assistant

- Performed in-field quality control inspections, such as verifying stirrup and tie diameter and spacing and corroborating electrical and sanitary installation piping, at the construction site of a 25-story, 363-apartment residential building
- Recorded column, plate, beam, and girder paving on AutoCAD blueprints, and calculated the weekly area paved
- Calculated lintel material and brickwork needed, as well as estimated total pre-slab area, using Microsoft Excel

——— LEADERSHIP EXPERIENCE ——

Engineers Without Borders Rensselaer Polytechnic Institute Chapter

August 2021 - April 2025

President

- Managed internal and external operations, such as executive officers, finances, and professional and public relations
- Reorganized leadership structures to improve the 30-person chapter's workload balance, productivity, and morale
- Led the planning, organization, and execution of and managed 57 people at a fundraiser that raised \$4,036

Vice-President of Project Management

- Oversaw the operations of one local and two international infrastructure projects relating to solar power, irrigation, and shelter
- Supervised project leads and advised them on project planning, management, and development
- Spoke on behalf of the chapter in presentations to industry professionals and potential donors

Panama Project Lead

- Led a 15-person team on weekly meetings to solve the electricity needs of Sandubidi, a 350-person insular community in Panama
- Worked with professional engineers on wind load calculations, technical writing, travel budgeting, and expense reports
- Sustained communication in Spanish with Sandubidi to ensure our solution aligned with their current and future needs

Partial Credit A Cappella Music Group at Rensselaer Polytechnic Institute

January 2022 - April 2025

Music Director

• Planned and ran six hours of rehearsals a week, created semester-long schedules, and set goals, deadlines, and expectations

PROJECT AND VOLUNTEER EXPERIENCE

<u>Civil Engineering Capstone Design</u> Senior Project at Rensselaer Polytechnic Institute

January 2025 - April 2025

Structural Engineering Team

- Designed a 113,000-ft² five-story mixed-use building in a six-person team considering sustainability, transportation, and client needs
- Performed structural analysis, such as member sizing and base plate design, for steel
- Developed a preliminary column grid using AutoCAD and calculated embodied carbon for steel and concrete using Google Sheets

Engineers Without Borders Isla Popa, Bocas del Toro, Panama

May 2024

Project Team Volunteer and Translator

- Installed two solar electric systems and lights for Sandubidi's school, church, and dining hall, which will enhance their education by providing power for computers, projectors, and internet access, as well as improve quality of life through energy for lights and fans
- Led a training session in Spanish on the maintenance of photovoltaic systems and batteries, acted as a Spanish/English translator for the project team, community members, and local hardware stores, and conducted interviews to survey community satisfaction

— SKILLS —

Languages: Spanish (native language), English (bilingual proficiency)

Engineering Software: AutoCAD, SAP2000, MATLAB, Revit, OpenFOAM, SimScale, SALOME General Software: Google Sheets, Microsoft Office, Python (Programming), R (Programming)

