

# Christopher Miranda Soto

christophermirandasoto@gmail.com · (623) 262-6096 · Phoenix, Arizona

## EDUCATION

### Cornell University, College of Engineering

Bachelor of Science in Mechanical Engineering

Ithaca, NY

May 2027

- GPA: 3.87
- Awards and Honors: Hispanic Scholarship Fund Scholar, Church at Litchfield Park Scholarship Recipient
- Relevant Courses: Data Science for Engineers, Python for Engineers, Differential Equations, Linear Algebra, Multivariable Calculus, Statics and Mechanics of Solids, Thermodynamics, Fluid Mechanics, Dynamics

## TECHNICAL EXPERIENCE

### Air Products and Chemicals, Inc.

Houston, TX

Estimation Engineer

June 2025 - August 2025

- Performed data validation and labor rate calculations by analyzing plot plans and integrating contractor inputs into ASPEN software to support precise cost modeling.
- Spearheaded a self-directed project to build and enhance Excel-based tools for tracking historical cost estimates against contractor bids, improving the accuracy and efficiency of future cost forecasting.
- Developed applied knowledge of thermodynamic cycles and heat integration in large-scale gas processing systems through engagement in technical reviews and engineering presentations.

### AquaClara Cornell Engineering Project Team

Ithaca, NY

Ram Pump Engineer

February 2024 - Present

- Designed, tested, and helped optimize the AquaClara Ram Pump, an electricity-free water pumping system, and traveled to Honduras to assist in its physical installation and evaluation.
- Presented key findings on water treatment optimization to cross-functional teams, contributing to improvements across 24 AquaClara treatment plants serving over 95,000 people across Central America.
- Coordinated with team members to ensure proper setup and functionality of an experimental treatment apparatus, including managing equipment calibration and responding to any technical challenges during experiments.
- Developed Python algorithms to analyze spring forces, deflection, and stress using statics-based mathematical models.

## COMMUNITY ENGAGEMENT & LEADERSHIP

### World Help Through Technology

Palawan, Philippines

Digital Literacy Team Facilitator

July 2024 - August 2024

- Engaged with local communities by providing digital literacy workshops and implementing technical improvements in computer labs, addressing educational and technological barriers while increasing technology availability in economically challenged regions.
- Collaborated with local organizations to address project needs and manage quality issues, ensuring smooth operations and positive community interactions in a variety of cultural settings.
- Pioneered a successful fundraising initiative by forging partnerships with key contributors to secure over \$50,000 from diverse donors, providing the resources to deliver 30 computers and support digital literacy programs in local schools.

## SKILLS & INTERESTS

**Skills:** Python, Excel, Matlab, Autodesk Fusion 360, Spanish (Native), Stress Analysis, Leadership, Analytical, Creative, Problem Solving, Team Collaboration, Quick Learner, Excellent Verbal and Written Communication Skills

**Extracurriculars:** CRU Music Team Lead, Ignite Music Team Lead (600+ people), Cornell Mariachi, Calvary Chapel Pianist, Volunteer at Second Wind Shelters for the Homeless, Intramural Soccer, Salsa Pa'lante Dance Club, SHPE

**Interests:** Piano, Salsa, FC Barcelona, Asian Food, Mariachi, Gamelan, Cinematography, Apple Juice