

# Ana Jaramillo

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## EDUCATION

**Pomona College**, Claremont, CA

Expected May 2025

*Bachelor of Arts, Biology Major & Mathematics and Statistics Minor*

GPA: 3.5

**Relevant Coursework:** Foundations of Data Science, Analysis of Biological Data, Bioinformatics and Genomics, Biotechnology in Practice, Advanced Cell Biology, Intro Genetics, Biochemistry, Organic Chemistry, Calculus (I/II/III), General Chemistry (I/II)

**Terra Environmental Research Institute**, Miami, FL

Graduated June 2021

*High School Superintendent's Diploma, Rank: 6/353*

GPA: 5.03

## WORK EXPERIENCE

**University of Melbourne Bioinformatics Research Project**, Melbourne, VIC – *Research Intern*

May 2023 – October 2023

- Developed and applied 12+ statistical models in R to analyze and visualize large genomic datasets of over 1 million data points, translating complex data into clear, actionable insights presented at international research symposiums.
- Executed predictive analysis on transcriptional data for 10,000+ sequence reads using the HISAT2 alignment program on the Galaxy platform, mapping and quantifying gene expression levels across sex chromosomes in parasite *Schistosoma haematobium*.
- Collaborated cross-functionally with a team of 5 graduate and PhD researchers to design and optimize research protocols, ensuring rigorous data accuracy across the study.

**Laboratory Teaching Assistant**, Claremont, CA – *Teaching Assistant*

August 2022 – May 2023

- Guided 30+ students in data analysis, visualization, and interpretation, coaching them in transforming raw data into clear, impactful reports and presentations that align with professional scientific standards.
- Led hands-on training sessions in data-driven techniques such as western blotting, gel electrophoresis, and spectroscopy, emphasizing precision in data handling and fostering a strong foundation in quantitative analysis.
- Facilitated collaborative learning and problem-solving within lab groups, enhancing students' ability to work effectively in teams on data-driven projects, a skill critical for real-world healthcare research environments.

**Summer Undergraduate Research Program**, Claremont, CA – *Intern; Co-author*

June 2022 – August 2022

- Led sample collection and designed experimental protocols for ecological research across 5 diverse Southern Californian ecosystems, ensuring comprehensive data collection methods that minimized data variance and kept dataset integrity across multiple study sites.
- Co-authored a peer-reviewed [research paper](#) published in Diversity, translating raw field data into meaningful insights and contributing to data visualization and statistical analysis sections.
- Developed a professional research poster in PowerPoint to present findings at academic conferences, skillfully transforming complex data into clear visuals that highlighted key patterns and actionable conclusions for scientific audiences.

**Robert J. Bernard Field Station Research**, Claremont, CA – *Restoration Technician; Co-author*

September 2021 – May 2022

- Coordinated and conducted research on plant-soil feedback mechanisms and the interactions between native and invasive species, as well as herbivore effects on ecosystem health and biodiversity.
- Led systematic data collection for 20+ native plant species across 6 control and 6 experimental plots, ensuring accuracy and consistency to support robust analysis.
- Performed microbial analyses, DNA extraction, Permanova tests, and nitrogen and carbon level assessments, generating comprehensive datasets that informed research conclusions on ecological restoration.
- Co-authored a peer-reviewed [publication](#) in MDPI Diversity, contributing data analysis and visualizations that communicated significant findings on biodiversity conservation and ecosystem health.

## SKILLS

**Programming Languages:** Python, R, SQL, Processing, Arduino, MATLAB, HTML

**Software/Programs:** Microsoft Excel, MS Office Suite, Powerpoint, Google Workspace, BLAST, HISAT2, Galaxy, Premier Pro, Photoshop, Adobe Creative Cloud Products, Audacity, Ableton, Various Phylogenetic Tree Softwares (IQ-TREE, ProtTest3, TreeAlign, etc.)

**Languages:** Spanish, French, Chinese

## LEADERSHIP & PROFESSIONAL DEVELOPMENT

**Lead Board Member**, Women and Minority Voices in Stem (2020 – Present)

**Founder**, Our Dream Community Service Project for Underrepresented Youth (2019 - Present)

**Scholar**, LOFT Fellowship: Healthcare and Science Leadership Institute (2021 – 2022)

## HONORS

Posse Foundation Full-Tuition Leadership Scholarship (2021 - 2025)

1for2 Foundation "Pay-it-Forward" Scholarship (\$14,700 – 2021-2025)

Institute for Study Abroad Scholarship—Melbourne, Australia: Academic Year (2023)

Taco Bell Live Mas Video Scholarship (\$10,000 – 2021; \$10,000 – 2023)

2 Published Research Articles (2022 – 2023)

Hispanic Scholarship Fund Scholar (2020 – 2023)