

Natalia Morales

Saint Paul, MN / USA | +1 612 490 4642 | nmorale1@macalester.edu | [LinkedIn](#) | [Portfolio](#)

EDUCATION

MACALESTER COLLEGE | SAINT PAUL, MN / USA

Data Science Major/Political Science Major

Awards: UWC Davis Scholar, Chuck Green Fellow, Kofi Annan Scholarship, Dean's List

Study Abroad: Leiden University College The Hague

Relevant coursework: Statistical Machine Learning, OOP & Abstraction, Introduction to Database Management Systems, Linear Algebra, Empirical Research Methods, Data-Driven Governance, Nuclear Energy Security Studies, CAAC and CRSV as a tactic of war, Literary Publishing, Geography of World Urbanization, Urban Politics of Latin America, Political Economy of Development, Anticorruption Public Policy Analysis

Bachelor of Arts Expected May 2026

3.61 GPA

WORK EXPERIENCE

MAYOR JACOB FREY CAMPAIGN | *Campaign Fellow*

September - November 2025

- Coordinated logistics for 5+ campaign events (Meet & Greets and rallies), supporting smooth execution and attendee engagement.
- Canvassed 2000+ households and completed 700+ voter contacts via door knocking and phone banking, recording responses and follow-up needs in the campaign system.
- Maintained and analyzed voter contact data for 2000+ records and interactions, tracking outreach metrics and updating databases to guide targeting and follow-up strategy.

COPAL MN | CHUCK GREEN FELLOW

May - July 2025

- Co-authored and helped present two project proposals that contributed to securing \$40,000 in donor and grant funding.
- Audited and cleaned data from 100+ grant applications, updating records in EveryAction to improve database accuracy.
- Designed and launched a Google Sites webpage to showcase a key organizational project.
- Interviewed 30+ staff and community members and transformed their stories into data-informed narratives aligned with organizational metrics.

MACALESTER COLLEGE POLITICAL SCIENCE DEPARTMENT | *Office Assistant*

September 2025 - Present

- Organize and assist 5+ campus-wide events per semester with setup, catering, designing, and distributing publicity.
- Collect information from 50+ majors and minors through forms and emails, and organize them through spreadsheets and boards.

MACALESTER COLLEGE FACILITIES SERVICES | *Office Assistant*

September 2022 – Present

- Provide customer service to 300+ customers by phone, email, or in person to provide information.
- Follow detailed directions to complete daily paperwork and computer data entry, including 5+ daily van reservations, 20+ master keys access, and 10+ invoices.
- Complete clerical tasks such as developing, filing, and distributing physical and electronic mail to 20+ employees in the office.

MACALESTER COLLEGE | *Reservations Assistant*

Summer 2023, 2024, and 2025

- Booked and organized 50+ events per term on campus through EMS Software.
- A/V assistance for events such as conferences, summer camps, and keynote speakers with 200+ attendees.
- Maintained and organized key and card access records for 500+ visitors using Excel spreadsheets, ensuring accurate data entry and efficient tracking.

PROJECTS

SENIOR THESIS | *Economic Pessimism and Attitudes Toward Migrants in the MENA Region*

Sep - Dec 2025

- Cleaned and organized Arab Barometer Wave VIII survey data from 15,000 respondents in R, and created analysis-ready variables on economic perceptions and Foreign Domestic Workers' rights
- Performed an ordinal regression model and used a process-tracing framework to probe the plausibility of causation.
- Summarized public opinion patterns with 10 visuals and short memos to translate findings for non-technical audiences.

SENIOR THESIS | *MET: Visualizing High Fashion*

Nov - Dec 2025

- Built an interactive D3 scrollytelling site analyzing the Met Costume Institute collection of 300k+ records, including a country-level bubble map, materials over time, and a designer diversity narrative through animated charts.
- Pulled and displayed object images via an API, and implemented responsive, interactive graphics using D3 + SVG with custom HTML/CSS layouts.
- Applied network analysis and centrality metrics to examine which designers and fashion houses receive credit, highlighting patterns of attribution across the collection.

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STATISTICAL MODELING | *Feature-Based Clustering of Madonna's Billboard Hits Using PCA and Hierarchical Methods*

- Analyzed 48 Madonna songs from the Billboard Top 100 using hierarchical clustering on 11 Spotify audio features; identified 7 distinct musical clusters capturing variations in danceability, energy, acousticness, and valence.
- Applied PCA to reduce dimensionality; found that the first 2 principal components explained ~36% of total variance, highlighting tempo and valence as key contributors to song popularity.
- Created and interpreted heatmaps, dendrograms, and PCA loadings plots to uncover stylistic groupings, including high-energy dance tracks and theatrical outliers forming singleton clusters.

LLM ANALYSIS | *Decoding Cult Classics: What Separates the Films That Stick?*

- Built an interactive Shiny app that classifies films as slow-burn vs. mainstream using four “cult-trajectory” metrics and ratings-over-time visualizations
- Created a cult-classifier outcome by querying an LLM via the OpenAI API, aggregating responses, and validating results against a manually labeled sample of 50 randomly selected films.
- Trained and evaluated multiple parametric and non-parametric models with out-of-sample validation, tuned a final ensemble, and generated predictions for which recent films are likely to become future cult classics.

SHINY APP DEVELOPMENT | *Deforestation and political shifts in Brazil (2000–2023)*

- Built an interactive Shiny App using shapefiles at national, state, and municipal levels to analyze Brazil's tree cover loss (2000–2023) alongside political shifts.
- Created a custom dataset of Brazilian presidents and political leanings; integrated it into an interactive plot linking annual deforestation trends to presidential administrations.
- Developed dynamic maps and time-series visualizations, including a year-selectable tree cover map (2000, 2010, 2020) and rolling-average loss plots by state.

EMPIRICAL RESEARCH | *Perceived Suitability of Democracy in Jordan*

- Examined the strongest factors affecting a person's opinion on the suitability of democracy for Jordan.
- Wrangled a dataset of 13219 observations to create and organize the final dataset consisting of 2024 observations.
- Conducted Chi-squared tests and Spearman's Rank Correlation tests to establish a relationship and its nature between different factors and the suitability of democracy while controlling for age and gender.

EMPIRICAL RESEARCH | *Women and Policymaking in Guatemala and El Salvador*

- Examined the correlation between increases in female representation post-civil war and the rise in legislation benefiting marginalized groups, using data from Guatemala and El Salvador.

CONSUMPTION ANALYSIS | *Annual Personal Consumption of Coffee*

- Modeled annual coffee consumption as a two-variable linear function of age and sleep using realistic coefficients; visualized output with 3D plots in Mathematica.
- Applied Riemann sums and integrals to estimate lifetime consumption (12,000 cups from ages 18–70) and calculate average yearly intake (230 cups for ages 30–50).
- Used symbolic and numerical integration to quantify lifetime and period-specific consumption patterns; illustrated accumulation with a concave integral curve and computed average values over defined age intervals.

PUBLISHING | *Moonsprout: A literary garden*

- Collaborated with a team of 11 to produce and publish a multi-genre literary anthology over a 4-month semester, launched at a public event with ~60 attendees.
- Edited 6 of 11 submissions (including poetry, prose, and novel excerpts) and contributed to final copyediting for the full collection.
- Designed the front and back covers; supported print production and distribution of 100+ physical copies across Macalester College.

LEADERSHIP & PROFESSIONAL DEVELOPMENT

MACALESTER ADELANTE! STUDENT ORGANIZATION | President

May 2023 - May 2025

- Led and organized 15 board meetings per semester.
- Coordinate 1-2 cultural events per month, monitor the \$8000+ budget, and delegate tasks to 10 board members.
- Collaborate with other student organizations and external actors, such as academic departments and institutions, to provide students with opportunities like internships and project support.

SKILLS

SOFTWARE & TOOLS: Github | Microsoft Office | Adobe | Google Suite | Canva

PROGRAMMING LANGUAGES: R & R Studio | Plotly | Shiny | Javascript | HTML | Python | Java | LaTeX | Mathematica

LANGUAGES: English | Spanish | French