

MARIE TANO

mtano@stanford.edu ◊ www.mariemmanue.github.io

EDUCATION

Stanford University, PhD in Linguistics Expected Jun. 2027

Dissertation: Language as a Marker of Identity in Policing: Using machine learning to investigate Racial Bias and Respect in Traffic Stops

Pomona College, Bachelor of Arts in Cognitive Science May 2021

Non Degree Programs

African Linguistics School 6 (ALS6) Jun. - Aug. 2022

Centre Songhai, Porto-Novu, Benin

- Participated in advanced courses in linguistic theory, and professional development workshops focused on grant writing, conference presentations, and manuscript preparation to enhance skills in academic writing and communication.

Summer Research Opportunity Program (NSF Award #2017716) Jun. - Aug. 2020

Northwestern University, Department of Linguistics

- Utilized acoustic analysis software to perform vowel formant analyses on Black Chicago residents

MICHERS: Humanities Emerging Research Scholars Program Jun. - Jul. 2020

University of Michigan — Ann Arbor, Department of Linguistics

- Conducted independent research through dataset analysis and literature reviews of psycholinguistic literature under the guidance of faculty mentors

RESEARCH INTERESTS

LINGUISTICS

SOCIOPHONETICS, RACIOLINGUISTICS, AFRICAN AMERICAN LANGUAGE

TECHNOLOGY

COMPUTATIONAL LINGUISTICS, RESPONSIBLE AI, SPEECH & DIALECT RECOGNITION

HONORS AND AWARDS

Fellowships and Scholarships

DARE: Diversifying Academia, Recruiting Excellence Doctoral Fellowship 2025

Stanford University

Tech Ethics and Policy Fellowship 2024

Stanford Institute for Human-Centered Artificial Intelligence (HAI)

GRFP: Graduate Research Fellowship Program 2023

National Science Foundation

Predocctoral Fellowship Program – Alternate

Ford Foundation

RAISE: Research, Action, and Impact through Strategic Engagement Doctoral Fellowship

Stanford University

EDGE: Enhancing Diversity in Graduate Education Doctoral Fellowship 2021

Stanford University

MMUF: Mellon Mays Undergraduate Fellowship 2019

Mellon Foundation

Questbridge Match Scholarship 2016

Awards and Grants

Credit, \$1000

OpenAI API Researcher Access Program

2025

Travel Award, \$800

Linguistics for Justice: Advancing Reforms in the Criminal Legal System Conference

Richard Braddock Award

2025 Conference on College Composition and Communication (CCCC)

Student Travel Award, \$1,000

2024

Linguistic Society of America, Committee on Ethnic Diversity in Linguistics (CEDL)

Student Travel Award, \$650

2023

Queens College, New Ways of Analyzing Variation (NWAY)

Student Registration Award

2020

Linguistic Society of America, Committee on Ethnic Diversity in Linguistics (CEDL)

Remote Alternative Independent Summer Experience (RAISE) Grant, \$2,500

Pomona College

PUBLICATIONS

In Progress

Tano, M. Performing Realness: Challenging Essentialist Models of Black Authenticity”.

Accepted

Podesva, R., Hernandez, A., Papineau, B., & **Tano, M.**, Velasquez, T., & Zhang, H. (2024). (DH)ere’s more than one way to strengthen a fricative: A social meaning approach to ethnic variation in the phonetic realization of the voiced interdental fricative. *Journal of English Linguistics*.

Under Review

Hoffmann, J., Ahlheim, C., Yu, Z., Walfrand, A., Jin, J., **Tano, M.**, Beirami, A., van Liemt, E., Thain, N., Sidahmed, H., & Dixon, L. (2025). Improving Neutral Point of View Text Generation through Parameter-Efficient Reinforcement Learning and a Small-Scale High-Quality Dataset. *arXiv preprint arXiv:2503.03654*.

Published

Franz, H., Grue, M., Rowell, A., **Tano, M.**, Johnson, S., & Charity Hudley, A. (2024). Black Linguistic Justice from Theory to Practice. *College Composition and Communication*.

Franz, H., Charity Hudley, A., Rowell, A., Johnson, S., **Tano, M.** & Grue, M. (2022). Black Students’ Linguistic Agency: An Evidenced-Based Guide for Instructors and Students. *American Speech*.

Holliday, N. & **Tano, M.** (2021). “It’s a Whole Vibe”: Testing evaluations of grammatical and ungrammatical AAE on Twitter. *Linguistics Vanguard*, 7(1).

PRESENTATIONS

Tano, M. *Towards an Automatic Dialect Density Measure for African American English* [Poster Presentation]. (2025). Linguistics for Justice: Advancing Reforms in the Criminal Legal System, University of Oregon.

Tano, M. *Multilingual Authenticity: Navigating Ethnic Identity Through Language*. (2024). The 55th Annual Conference on African Linguistics, McGill University.

Tano, M. *The Multiplicity of Authenticity: A Case Study on a Diasporic Speaker*. (2024). Annual Meeting of the Linguistic Society of America, New York, New York.

Tano, M. *The Multiplicity of Authenticity: A Case Study on a Diasporic Speaker.* (2023). *New Ways of Analyzing Variation*, Queens College.

Hernández, A., Papineau, B., **Tano, M.**, Velásquez, A., Zhang, H., Podesva, R. *(DH)ere's more than one way to strengthen a fricative: Voiced interdentals in a diverse sample of Californians.* (2023). *New Ways of Analyzing Variation*, Queens College.

Tano, M. *Does Blackness have a Sound?: Raciolinguistic Expectations of a Bidialectal Speaker.* (2021). 15th Arizona Linguistics Circle, University of Arizona.

Franz, H., Charity Hudley, A., Johnson, S., & **Tano, M.** (2021). *Black Students' Linguistic Agency: A Researched Guide for Instructors and Students.* Fourth HBCU Symposium on Rhetoric and Composition.

Tano, M. & Holliday, N. (2020). *It's a Whole Vibe: Testing Evaluations Of Grammatical and Ungrammatical AAE on Twitter.* *Advancing African American Linguist(ic)s Symposium*, University of California, Santa Barbara.

Invited Talks

The Construction of a Diasporic Self Phonology and Psycholinguistics Forum ("Phorum"), University of Berkeley	2023
Language, Race and Autonomy: African-American English in the Classroom Vote Rev Speaker Series, Online	2022
African-American English and Social Media Linguistics 338: African-American English, Reed College	2021

RESEARCH EXPERIENCE

Study of Stanford Writing Committee Jan. 2022 - Present
Office of the Vice Provost for Undergraduate Education, Stanford University

- Synthesized leading pedagogies from accredited peer institutions, leveraging research and analysis skills to identify best practices and inform strategic decision-making.
- Collaborated with external consultants to produce comprehensive reports on the history of rhetorical analysis and the instruction of writing in higher education, resulting in valuable insights and actionable recommendations.
- Designed and implemented machine learning models to automatically assess student writing for critical thinking, evidence use, and discourse quality, aligning NLP methods with educational rubrics and outcomes.

Student's Right to their own Language Sept. 2021 - Aug. 2022
Black Academic Development Lab, Stanford School of Education

- Created engaging and effective online pedagogical materials for both students and faculty, leveraging strong instructional design skills and a deep understanding of best practices in online learning.
- Provided valuable support to authors by offering detailed citations and edits to manuscripts and presentations, ensuring accuracy and clarity in academic writing.
- Led a critical literature review of existing scholarship related to Black student writing, providing essential insights and informing the rationale behind the project.

WORK EXPERIENCE

Multilingual Large Scale Language Models, Research Scientist Intern Jun. - Sept. 2025
International Business Machines Corporation (IBM), *Yorktown Heights, NY*

- Developed and deployed large-scale bias evaluation pipelines using IBM Granite embedding models and Hugging Face datasets (Natural Questions, BBQ), implementing identity-injection, retrieval drift, and cosine similarity experiments across 100k+ QA/context pairs.

- Optimized statistical and computational workflows (t-tests, ANOVA, volatility metrics) on HPC clusters (CCC, RITS), improving reproducibility with modular Python scripts, CLI tools, and unified evaluation functions.
- Communicated research findings to diverse stakeholders by creating technical reports, visualizations (bias plots, retrieval metrics), and GitHub repositories, supporting both academic collaborators and industry mentors.

Research Intern, Graduate Fellow

Jun. - Aug. 2024

Brookings Institution, Governance Studies (Center for Technology Innovation), *Washington, DC*

- Authored articles on responsible AI development and inclusive language technologies, including [Moving Toward Truly Responsible AI Development in the Global AI Market](#) and [Closing the Gap: A Call for More Inclusive Language Technologies](#)
- Supported workshops engaging policymakers, scholars, and industry experts to address the ethical challenges of generative AI in public sectors
- Engaged in collaborative research with Center scholars, specifically on AI’s impact on the Global South and the intersection of technology with race and social justice

Student Researcher

Jun. 2023 - Jun. 2024

Google Research, *Mountain View, CA*

- Designed and executed research protocols to evaluate and refine large-scale language models, focusing on enhancing interpretability and performance.
- Conducted in-depth analyses of LLM-generated outputs to inform the development of frameworks for assessing key linguistic attributes.
- Collaborated with cross-functional teams to implement survey methodologies, collecting diverse user perspectives to guide iterative improvements

Data Science Intern

Jan. - Apr. 2023

Stanford Law Center for Racial Justice, *Stanford, CA*

- Automated data processing and analysis, resulting in more efficient and accurate reporting in Census details
- Contributed to the development of the Center’s neighborhood Vulnerability Index, a database reflecting the social conditions that influence California neighborhoods equitable and inclusive communities through data-driven analyses
- Leveraged computational tools to extract and synthesize Census data on thousands of California Census tracts, regarding social factors such as unemployment rates and median income level

TEACHING EXPERIENCE

Graduate Student Assistantships

Language and Society (LINGUIST 150)

Sep. - Dec. 2024

Stanford University, Department of Linguistics

- Evaluated and graded student essays, written responses, and exams, ensuring clear and constructive feedback.
- Collaborated closely with the course instructor to calibrate grading standards and maintain feedback consistency across assignments.
- Supported a course examining how language varies across time, place, and social groups, and how linguistic practices shape and reflect social identities and relationships.

Phonetics (LINGUIST 105A/205A)

Jan. - Mar. 2023

Stanford University, Department of Linguistics

- Provided guidance to students in conducting quantitative sociophonetic research, demonstrating expertise in research design and methodology.
- Led discussion sections on Praat, an acoustic analysis software, and other quantitative methods in sociophonetics, fostering an engaging and interactive learning environment.
- Facilitated student learning and comprehension by breaking down complex concepts into easily digestible parts, resulting in improved student performance and success in the course.

Building a Successful Academic Career (UAR 56)

Sept. 2022 - Jun. 2023

Stanford University, Black Community Services Center

- Served as a dedicated advocate for students, working closely with them to identify their research goals and supporting them throughout the research process.
- Guided students in finding their voice and developing their ideas, particularly in projects exploring the legacy of black students at Stanford University, using strong mentoring skills and a deep understanding of the subject matter.
- Fostered connections between students and the broader graduate and undergraduate community, facilitating networking opportunities and promoting a sense of fellowship and collaboration among scholars.

Research Supervision

Black Academic Development Lab (NSF Award #1757654)

Jun. - Sept. 2022

Stanford University, School of Education

- Advised undergraduate research projects focused on exploring linguistic racism and bias in grammar-checkers and style tools, demonstrating a commitment to fostering critical thinking and social awareness among students.
- Provided thoughtful and constructive feedback on research reports and graduate school applications, leveraging strong communication skills and attention to detail to support students’ academic and professional growth.
- Acted as a liaison between students and professors, streamlining communication, and ensuring a seamless experience for all parties involved.

SERVICE

Committee Service

Outside Reader

Dec. 2024 - Feb. 2025

Admissions Committee, Pomona College

Social Committee

Sept. 2021 - Jun. 2023

Department of Linguistics, Stanford University

New Ways of Analyzing Variation 50 (NWAV50) Conference Planning Committee

Sept. 2021 - Nov. 2022

Department of Linguistics, Stanford University

Committee on Ethnic Diversity in Linguistics (CEDL)

Sept. 2020 - Present

Linguistic Society of America

Panels

Mellon Mays Alumni Panel

2025

Pomona College

CSRMP gStudent Experience Panel

2023

CS Research Mentorship Program, Google

MMUF Life As A Graduate Student Panel

Mellon Mays Undergraduate Fellowship, Stanford University

Smart Start Fellowship Alumni Panel

2022

Pomona College

Mellon Mays Alumni Panel

Pomona College

Spring Perspectives On Pomona (POP) Student Panels

2021

Pomona College

Leadership Positions

Graduate Scholar-in-Residence

Sept. 2022 - Present

Black Community Services Center, Stanford University

- Manage and facilitate cross-cultural collaborations with other community centers on campus, developing and maintaining strong partnerships to foster a culture of inclusion and diversity.
- Promote engagement and collaboration between Black undergraduate and graduate students, using strong interpersonal skills and a deep understanding of community building to drive positive outcomes.
- Provide key assistance in creating entry points for current graduate students to engage with the Black Community Services Center, resulting in improved access and increased participation in important programs and initiatives.

PROFESSIONAL AFFILIATIONS

Stanford University Natural Language Processing (NLP) Group

2021 - Present

Stanford Black Academic Development (BAD) Lab

2021 - Present

Linguistic Society of America

2020 - Present

SKILLS

Natural Languages

PROFICIENT

FRENCH

BASIC

SPANISH

Technology

LANGUAGES

PYTHON (PANDAS, NUMPY), R, JAVASCRIPT, C++, R (STUDIO), HTML, SQL, L^AT_EX

APPLICATIONS

PRAAT, JMP, SPACY, GIT, R STUDIO, ELAN