

AJ ALVERO

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RESEARCH INTERESTS

Computational Social Science Sociology of Language Sociology of Race & Ethnicity
 Access & Inequality in Education Applied NLP Fairness & Ethics in Computation

POSITIONS

University of Florida *Beginning 01/2023*
 Assistant Professor, Department of Sociology and Criminology & Law [[Link](#)]

Stanford University 09/2016 – 06/2022
 Graduate Affiliate, Pathways Lab [[Link](#)]
 Co-founder, Student Narratives Lab [[Link](#)]

EDUCATION

PhD, Education Data Science || Sociology of Education 2022
 Stanford University
Dissertation: “Language, Culture, and Systems of Evaluation:
 Computational Analyses of College Admissions Essays”
 Coursework in Race, Inequality, & Language in Education

Graduate Certificate in Computational Social Science 2021
 Stanford University Center for Computational Social Science

MS, Statistics 2021
 Stanford University

MS, Foreign Language Education (TESOL) 2016
 Florida International University
Thesis: “Efficacy and Implementation of Automated Essay Scoring
 Software in Instruction of Literacies to High Level ELLs”

BA, English Minor in Modern Languages (Spanish & Haitian Creole) 2012
 University of Miami

RESEARCH & WRITING

Papers are either open access or available on my personal website

* denotes equal authorship

† denotes undergraduate or masters student

Peer-Reviewed Publications

- Giebel, S., **Alvero, A.**, Gebre-Medhin, B., antonio, a. (2022) “Signaled or Suppressed? How Gender Informs Women’s Undergraduate Applications in Biology and Engineering” *Forthcoming, Socius* [[Preprint](#)][[Data/Code](#)]

6. **Alvero, A.**, Pal, J.^{*†}, Moussavian, K.^{*†} (2022) “Linguistic, Cultural, and Narrative Capital: Computational and Human Readings of Transfer Admissions Essays” *Forthcoming, Journal of Computational Social Science* [[Preprint](#)][[Code/Data](#)]
5. Gebre-Medhin, B., Giebel S., **Alvero, A.**, antonio, a., Domingue, B., Stevens, M. (2022) “Application essays and the ritual production of merit in US selective admissions.” *Poetics* [[Paper](#)]
4. Tena-Meza, S.[†], Suzara, M., **Alvero, A.** “Coding with Purpose: Learning AI in Rural California.” (2022) *ACM Transactions on Computing Education* [[Paper](#)]
3. **Alvero, A.**, Giebel, S., Gebre-Medhin, B., antonio, a., Stevens, M., Domingue, B. (2021) “Essay Content and Style are Strongly Related to Household Income and SAT Scores: Evidence from 60,000 Undergraduate Applications.” *Science Advances* [[Paper](#)][[Code/Data](#)]
2. Arthurs, N.[†], **Alvero, A.** (2020) “Whose Truth is the “Ground Truth”? College Admissions Essays and Bias in Word Vector Evaluation Methods.” *Proceedings of the 13th International Conference on Educational Data Mining* [[Paper](#)]
1. **Alvero, A.**, Arthurs, N.[†], antonio, a., Domingue, B., Gebre-Medhin, B., Giebel, S., Stevens, M. (2020) “AI and Holistic Review: Informing Human Reading in College Admissions.” *Proceedings of the AI, Ethics, and Society* [[Paper](#)]

Under Review

- 2022 Giebel, S.^{*}, **Alvero, A.**^{*}, Pearman, F. “Income Campus Disparities Among Hispanic-Identifying UC Applicants: Implications for Hispanic Serving Institution Designation ” [[Preprint](#)]
- 2022 **Alvero, A.**, Pattichis, R. “Linguistic and Cultural Strategies: Identification and Analysis of Spanish Language Usage in College Admissions Essays” [[Preprint](#)]
- 2023 **Alvero, A.** “Critical Perspectives on the Use of Readability Scoring in Education” (*Abstract accepted for book chapter, in preparation*) [[Link](#)]
- 2023 **Alvero, A.** “Sociolinguistic Perspectives on Machine Learning with Textual Data” (*Accepted as chapter for The Oxford Handbook of the Sociology of Machine Learning*)

Manuscripts in Preparation

- 2022 **Alvero, A.**, Luqueño, L., Pearman, F., antonio, a. “Social Influences on Textual Production: Intersectionality, Geography, and College Admissions Essays” [[Preprint](#)]
- 2022 **Alvero, A.**, Kanopka, K., Sedlacek, Q., “A Call for Critical and Constructive Educational Data Science” [[Link](#)]

Opinion

- 2017 **Alvero, A.** “Renaming ‘Confederate Corners’ doesn’t cost a thing.” *The Salinas Californian*. [[Article](#)]

TEACHING

Stanford University

Introduction to Statistical Methods
With Dan Schwartz

Fall 2021

Introduction to Data Science
With Sanne Smith and Dan McFarland

Winter 2019

Equity and Schooling
With Jonathan Rosa

Summer 2019

The Centrality of Literacies
With Antero Garcia

Summer 2017, 2018

Adolescent Development
With Linda Darling-Hammond and Shayna Sullivan

Fall 2016, 2017

PRESENTATIONS

Invited Presentations & Lectures

- 2022 Stanford Center for China's Economy and Institutions (Freeman Spogli Institute), Stanford EAST House, Educational Testing Service (ETS), University of Texas at Austin Department of Mexican American and Latina/o Studies, University of Tennessee, Knoxville School of Information Sciences, University of Florida Department of Sociology
- 2021 College Board Research and Psychometrics Team, University of California Board of Admissions and Relations with Schools (BOARS), Stanford GSE Policy, Organization, and Leadership Studies Seminar, Association of College Counselors in Independent Schools (Data, Analytics, and Trends Committee), Wieman Group
- 2018 Stanford University, Center for Population Health Sciences; Stanford University, Students for Education Reform; Stanford University, Computational Text Analysis in the Social Sciences Group; Stanford University, Higher Education Exchange of Research

Conference Presentations & Activities

- 2022 New Directions in Analyzing Text as Data, 8th International Conference on Computational Social Science, American Sociological Association, Latina/o Studies Association, National Council on Measurement in Education, American Education Research Association
- 2021 National Association for College Admission Counseling (NACAC) Conference, ACM Conference on Fairness, Accountability, and Transparency (FAccT), American Sociological Association, American Education Research Association, West Coast NLP (WeCNLP), Computational Social Science Society of the Americas, Transforming Institutions Conference
- 2020 Mechanism Design for Social Good (MD4SG), Association for the Study of Higher Education, Society for Social Studies of Science Conference (*declined*), American Sociological Association, American Educational Research Association Satellite Conference on Data Science, Comparative & International Education Society, 26th Annual Conference on Language, Interaction, and Culture at UCLA (*cancelled*), Sociology of Education Association
- 2019 TextXD Symposium, International Conference on Machine Learning (Latinx in AI Workshop)
- 2018 TextXD Symposium
- 2017 Race, Inequality, and Language in Education (RILE)
- 2016 Carribean Studies Association

PROJECTS & GRANTS

Race, Genetic Ancestry, and Context: Exploring how the Genetic Ancestry Tests Influence Conceptions of Race

Columbia Population Research Center Seed Grant (\$20,000)
PIs: Marissa Thompson, Sam Trejo, Daphne Martschenko, AJ Alvero

Student Narratives Lab

Initiated data share with University of California Office of the President
PIs: Mitchell Stevens, anthony antonio, Ben Domingue

Building an Anti-Racist GSE

Syllabus consultant, Education Data Science courses

Computational Text Analysis in the Social Sciences

“Student Projects for Intellectual Community Enhancement” Grant (\$5,000)

SELECT MEDIA MENTIONS & APPEARANCES

The Atlantic [1], Los Angeles Times [1], New York Times [1, 2], The New Yorker [1], Harper’s Magazine [1], The Economist [1], Newsweek [1]The Chronicle of Higher Education [1], MIT Admissions [1], Inside Higher Ed [1, 2], Higher Ed Dive [1], Forbes Magazine [1], Pod Save the People [1], ABC7 News Bay Area (KGO-TV) [1], Mustang News (Cal Poly) [1], Wall Street Journal [1, 2], School’s In (Podcast with Stanford GSE Dean Dan Schwartz and Denise Pope) [1], The Philadelphia Inquirer [1], The Journal Editorial Report [1], Monterey County Weekly [1], The Smithsonian Magazine [1], Diverse Issues in Higher Education [1], The Salinas Californian [1], Reason.com [1], Brookings Institution [1]

HONORS & AWARDS

Stanford University

VPGE Academic Achievement Award	\$500	06/2022
Stanford GSE: Research and Academic Excellence	<i>Nominated</i>	06/2022
Human-Centered Artificial Intelligence (HAI) Graduate Fellow	\$2,000	09/2021 – 06/2022
McCoy Family Center for Ethics in Society Fellow	\$3,000	09/2020 – 06/2021
Diversifying Academia, Recruiting Excellence Fellowship	\$96,200/2 years	09/2019 – 06/2021
Interdisciplinary Graduate Fellowship		
<i>Naidu Family Interdisciplinary Graduate Fellowship</i>	\$133,080/3 years	09/2018 – 06/2020
Enhancing Diversity in Graduate Education Fellowship	\$12,800/4 years	09/2016 – 06/2020
The Dean’s Fellowship	\$30,000	09/2016

Florida International University

FLAS Summer Fellowship at the Haitian Summer Institute	\$6,680	05/2015
Madeline Kitts Scholarship	\$5,000	05/2015
FIU Graduate Grant	\$5,000	05/2015
Bellsouth Education Scholarship	\$3,000	08/2015
FIU Latin American and Caribbean Center Scholarship	\$500	05/2015

Other

ICQCM Spencer Scholar		06/2021
International Conference on Machine Learning Travel Grant	\$1,500	06/2019
El Centro Chicano y Latino Charlene J. Porrás Award	\$1,000	06/2019
El Centro Chicano y Latino Outstanding Graduate Mentor		09/2018 – 06/2019
Hispanic Scholarship Fund (2016 and 2017)	\$6,500	
Eugene V. Cota-Robles Fellowship (<i>declined</i>)		

PROFESSIONAL ACTIVITIES

Member

American Sociological Association
American Educational Research Association
Association for Computing Machinery

Reviewer

Journal: AERA Open, Proceedings of ACM Fairness, Accountability, and Transparency (FAccT), Educational Researcher, Social Currents, Sociology of Education, Journal of Engineering Education

Conference: American Educational Research Association, Literacy Research Association, South Florida Education Research Conference, TESOL International

SERVICE & ENGAGEMENT

University of Florida

Data Science Curriculum Planning Committee 09/2022 –

Stanford University

Co-President, Sociology and Education Network 09/2020 – 06/2021

El Centro Chicano y Latino Graduate Scholar in Residence 09-2018 – 09/2020

EDGE Mentor 09/2018 – 06/2019

Mentor and Program Organizer, Stanford GSE Mentorship Program 09/2017 – 06/2018

Financial Officer, Computational Text Analysis in the Social Sciences 09/2017 – 06/2020

Advising

Graduate Student Advisor:

Thea Rossman, Capstone Project in Critical Studies in Race and Ethnicity 2020

Noah Arthurs, Undergraduate Thesis in Computer Science 2017

Research supervisor, Stanford Institute for Research in the Social Sciences

Research Assistant Internship Program [\[Link\]](#) 06/2020 – 06/2022

Interns: Alicia Hoffmann, Misha Moussavian, Jasmine Pal

TRAINING, WORKSHOPS, & OTHER EXPERIENCES

University of Miami:

Institute for Data Science and Computing 08/2022 – 08/2023

Visiting Fellow

Coral Gables, FL

National Institute on Aging:

Genomics for Social Scientists Workshop 06/2022 – 06/2022

Trainee and participant

Institute for Social Research, University of Michigan

Institute in Critical Quantitative, Computational, and Mixed Methodologies (ICQCM) Summer Training and Summit

06/2021 – 03/2022

Trainee and participant

Virtual and Baltimore, MD

The Summer Institutes in Computational Social Science

06/2020 – 07/2021

Instructor, San Francisco Bay Area site (BAY-SICSS)

Virtual

Stanford Graduate Summer Institute

08/2020

Student, *Ethics and the Academy*

Virtual

Stanford Libraries

10/2018

Presenter, *Gear Up for Social Science Data*
Palo Alto, CA

Stanford Center for Spatial and Textual Analysis

07/2017 – 09/2017

Visiting Scholar
Palo Alto, CA

ICPSR Summer Program in Quantitative Methods of Social Research

06/2017

Student, *Machine Learning for the Analysis of Text as Data*
Chapel Hill, NC

Haitian Summer Institute at Florida International University

06/2015 – 08/2015

Student and FLAS Fellow, Kimberly Green Latin American and Caribbean Center
Miami, FL & Southern Haiti

Miami-Dade County Public Schools

09/2013 – 06/2016

High School Language Arts Teacher, Claes Nobel Educator of
Distinction (National Society of High School Scholars)
Miami, FL

Cuban Heritage Collection at the University of Miami

08/2011 – 02/2012

Student archivist
Coral Gables, FL

LANGUAGES & SKILLS

Human Languages

Fluent Spanish; Proficient Haitian Creole; Basic Japanese (written and spoken)

Computer Languages & Software *Frequent:* R, Python, LaTeX, Unix, SLURM, Microsoft Office, Google Drive; *Not as frequent:* Javascript, Stata, Tableau, C++