

# AJ ALVERO

aalvero@ufl.edu – @aj\_alvero – www.ajalvero.com

## RESEARCH INTERESTS

---

Computational Social Science   Language   Race & Ethnicity   Gender  
Education   Culture   Inequality   Geospatiality

## POSITIONS

---

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

## EDUCATION

---

**PhD, Education Data Science & Sociology of Education** 2022  
Stanford University

*Dissertation:* “Language, Culture, and Systems of Evaluation: Computational Analyses of College Admissions Essays”

Graduate Affiliate, Pathways Lab [\[Link\]](#)

Co-founder, Student Narratives Lab [\[Link\]](#)

[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” [\[Link\]](#)

**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

7. Giebel, S., **Alvero, A.**, Gebre-Medhin, B., antonio, a. (2022) “Signaled or Suppressed? How Gender Informs Women’s Undergraduate Applications in Biology and Engineering” *Socius* [\[Paper\]](#)[\[Data/Code\]](#)
6. **Alvero, A.**, Pal, J.\*†, Moussavian, K.\*† (2022) “Linguistic, Cultural, and Narrative Capital: Computational and Human Readings of Transfer Admissions Essays” *Journal of Computational Social Science* [\[Paper\]](#)[\[Code/Data\]](#)

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.<sup>†</sup>, 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.<sup>†</sup>, **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.<sup>†</sup>, 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 AAAI/ACM Conference on AI, Ethics, and Society* [[Paper](#)]

## Book Chapters

2. **Alvero, A.** “Sociolinguistic Perspectives on Machine Learning with Textual Data” (*Forthcoming, The Oxford Handbook of the Sociology of Machine Learning.*)[[Preprint](#)]
1. **Alvero, A.** “Readability Scoring, Language Ideologies, and Social Stratification” (*Forthcoming, Learning machines, humans learning: Critical perspectives on languaging in digitally-mediated environments.*)

## Under Review

**Alvero, A.**, Peña, C. “AI Sentience and Socioculture”

Bell, K., Hong, J., Voss, C., Todd, G., Ugander, J., **Alvero, A.**, Searcy, J., McKeown, N. Using Machine Learning to Investigate the Role of Attorneys and Inter-Commissioner Variability at Parole-Release Hearings

Gonzalez, D., Staley, B., [**Alvero, A.** and 13 other co-authors]. “Representation and inclusion among members and affiliates of the Society for Epidemiologic Research: Findings from a 2021 survey”

**Alvero, A.**, Peña, C., Moore, A., Barron, C., Steele, L., Eberle, S., Botham, C. “Winning a competitive research award decreases time to degree in bioscience PhD programs, but not for everyone” (*Revise and resubmit*) [[Preprint](#)]

**Alvero, A.**, Pattichis, R. “Linguistic and Cultural Strategies: Identification and Analysis of Spanish Language Usage in College Admissions Essays” [[Preprint](#)]

## Manuscripts in Preparation

Kanopka, K., Lang, D., **Alvero, A.**, “Weighing Algorithmic Tradeoffs: Observations from 240,000 Admission Essays” [[Link](#)]

**Alvero, A.\***, Giebel, S.\*, Pearman, F. “Data Disaggregation or Decolonization? Disparities in College Applications between European and non-European Identifying Hispanic Students” [[Preprint](#)]

**Alvero, A.**, Luqueño, L., antonio, a., Pearman, F. “Social Influences on Textual Production: Intersectionality, Geospatiality, and College Admissions Essays” [[Preprint](#)]

## Opinion

2017 **Alvero, A.** “Renaming ‘Confederate Corners’ doesn’t cost a thing.” *The Salinas Californian*.

## TEACHING

---

### University of Florida

#### Undergraduate

|  |                   |
|--|-------------------|
| Sociology of Education                                   | Spring 2023, 2024 |
| Sociology of Race and Racism: Computational Perspectives | Fall 2023         |

#### Graduate

|  |             |
|--|-------------|
| Introduction to Quantitative Methods         | Fall 2023   |
| Introduction to Computational Social Science | Spring 2024 |

### Stanford University

|  |                   |
|--|-------------------|
| Introduction to Statistical Methods<br>With Dan Schwartz                 | Fall 2021         |
| Introduction to Data Science<br>With Sanne Smith and Dan McFarland       | Winter 2019       |
| Equity and Schooling<br>With Jonathan Rosa                               | Summer 2019       |
| The Centrality of Literacies<br>With Antero Garcia                       | Summer 2017, 2018 |
| Adolescent Development<br>With Linda Darling-Hammond and Shayna Sullivan | Fall 2016, 2017   |

## PRESENTATIONS

---

### Invited Presentations & Lectures

- 2023 Technology, Media, Privacy, and Law Conference (University of Florida Levin College of Law), Cornell University Presidential Task Force on Undergraduate Admissions, Pens & Pixels: Generative AI in Education (UC Irvine), Center for Peace, Justice, and Human Rights (Florida Atlantic University)
- 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, University of New Mexico Institute for the Study of "Race" and Social Justice
- 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 (Stanford GSE)
- 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**

- 2023 Eastern Sociological Society, International Society for Anthrozoology, American Sociological Association, National Council on Measurement in Education, American Education Research Association, Population Association of America, Virtual Workshop on Contemporary Parole Research, International Conference on Computational Social Science, Computational and Methodological Statistics (CMStats), Society for the Social Studies of Science
- 2022 New Directions in Analyzing Text as Data, 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, 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 Caribbean Studies Association

## **PROJECTS & GRANTS**

---

### **Summer Institute in Computational Social Science**

SICSS-South Florida (\$26,000)

PIs: Kevin Lanning, Kathryn Albrecht, AJ Alvero

### **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

### **Computational Text Analysis in the Social Sciences**

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

### **Student Narratives Lab**

Co-founder, 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

## **MEDIA MENTIONS & APPEARANCES**

---

Time Magazine [1], The Atlantic [1, 2], Los Angeles Times [1], New York Times [1, 2], The New Yorker [1], Harper’s Magazine [1], Teen Vogue [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], The Dartmouth [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 – 06/2022 |
| Interdisciplinary Graduate Fellowship                        |                   |                   |
| <i>Naidu Family Interdisciplinary Graduate Fellowship</i>    | \$133,080/3 years | 09/2018 – 06/2021 |
| 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. Porras 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, Science Advances, The Journal of Mathematical Sociology, Current Psychology

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

## SERVICE & ENGAGEMENT

---

### University of Florida

|                                   |           |
|-----------------------------------|-----------|
| Code of Conduct Service Committee | 08/2023 – |
|-----------------------------------|-----------|

**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 |

**Faculty Advising**

Dissertation Committee:

Dominique Fairley, Sociology, University of Florida  
 Rosario Fernandez-Romero, Sociology, University of Florida  
 Alejandra Regla-Vargas, Sociology, University of Pennsylvania

**Graduate Student 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: Joules Hoffmann, Misha Moussavian, Jasmine Pal

**TRAINING, WORKSHOPS, & OTHER EXPERIENCES**

---

**University of Oregon School of Law**

11/2022

Parole Transcript Data Workshop

Eugene, OR

**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**

2020, 2023

TA, San Francisco Bay Area site ([BAY-SICSS](#))Co-Organizer, South Florida site ([SICSS-South Florida](#))Speaker and Guest Lecturer, University of Pennsylvania site ([SICSS-Penn](#))**Stanford Graduate Summer Institute**

08/2020

Student, *Ethics and the Academy*

Virtual

|  |                   |
|--|-------------------|
| <b>Stanford Libraries</b><br>Presenter, <i>Gear Up for Social Science Data</i><br>Palo Alto, CA  | 10/2018           |
| <b>Stanford Center for Spatial and Textual Analysis</b><br>Visiting Scholar<br>Palo Alto, CA   | 07/2017 – 09/2017 |
| <b>ICPSR Summer Program in Quantitative Methods of Social Research</b><br>Student, <i>Machine Learning for the Analysis of Text as Data</i><br>Chapel Hill, NC                   | 06/2017           |
| <b>Haitian Summer Institute at Florida International University</b><br>Student and FLAS Fellow, Kimberly Green Latin American and Caribbean Center<br>Miami, FL & Southern Haiti | 06/2015 – 08/2015 |
| <b>Miami-Dade County Public Schools</b><br>High School Language Arts Teacher, Claes Nobel Educator of<br>Distinction (National Society of High School Scholars)<br>Miami, FL     | 09/2013 – 06/2016 |
| <b>Cuban Heritage Collection at the University of Miami</b><br>Student archivist<br>Coral Gables, FL   | 08/2011 – 02/2012 |

## LANGUAGES & SKILLS

---

### Human Languages

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

### Computer Languages & Software

*Frequent:* R, Python, LaTeX, Unix, SLURM

*Not as frequent:* Javascript, Stata, Tableau, C++