

JUAN M. ALZATE VANEGAS

Relocating to Pasco County, FL in Fall 2024 • (727)-687-9206 • juanma3@illinois.edu

PERSONAL STATEMENT: While focusing on statistics and people analytics at my university, I worked in the insurance sector through an internship at a Fortune 500 firm. My education and tactical experience helped me develop technical capabilities in data engineering and organizational science. I have consistently proven my ability to achieve project objectives, solve mission-critical problems using advanced analytical methods, and prioritize crucial tasks while maintaining the high standards expected of my role. I am currently seeking data science position to further my career goals.

EDUCATION

University of Illinois

Doctor of Philosophy in **Industrial-Organizational Psychology**

Master of Science in **Applied Statistics**

Master of Science in **Psychology**

University of Central Florida

Bachelor of Science in **Psychology, Statistics and Computer Science** minors, *Magna Cum Laude*

Urbana-Champaign, IL

Fall 2018 – Summer 2024

Spring 2024

Fall 2018 – Summer 2020

Orlando, FL

Fall 2015 – Summer 2018

RELEVANT COURSEWORK

Research methods Machine learning Neural networks & natural language processing Object-oriented programming

SKILLS

- AWS, Jupyter Lab, R, Python, C/C++, Java, JavaScript, SQL, Mplus, Postman, Google Colab, Sprinklr, LaTeX, MATLAB, SPSS, and SAS.
- Fluent in Spanish, English, and French; some Japanese. Experienced with submitting queries to ChatGPT.
- Trained by the Collaborative Institutional Training Initiative (CITI); experienced with Qualtrics, Sonar systems, and IRB human research reviews.
- Experienced with scheduling and auditing, filing paperwork and receipts, taking calls and e-mails; using Microsoft Office; Kaltura MediaSpace.
- Trained in HIPAA and FERPA, as well as World Health Organization (WHO) hygienic practices.

RELEVANT EXPERIENCE

State Farm (Enterprise Research)

Organizational Insights Team – *I/O Psychologist Intern* (supervisor: Kelly Carty)

- Developed improved selection procedures by deploying large language models (LLMs) to assess applicant competencies from resume text.
- Prepared and presented deliverables with actionable insights on insurance claims severity, caller satisfaction, and social media analytics for diverse stakeholders including business leaders and audiences of 30-60 employees.
- Led an initiative to develop guidelines and educational materials on data science and artificial intelligence to improve researcher effectiveness.
- Designed an animated visualization of insights in the talent acquisition process for Hack Day 2023.

Bloomington, IL

Summer 2023 – present

University of Illinois

Psychological Measurement Lab – *Graduate Researcher* (advisor: Fritz Drasgow)

- Designed a project for inferring personality traits from social media text (Twitter); wrote items for a new scale of the Dark Triad of personality.
- Compared machine learning models of attrition from basic military training in an article published by *Military Psychology* and presented at the 2022 SIOP conference in Seattle, WA; peer-reviewed 10 manuscripts in *Military Psychology*.
- Designed simulations to estimate the likelihood of retrieving a data-generating model from simulated data.

Urbana-Champaign, IL

Fall 2018 – present

Graduate Employees Organization (GEO) – *Psychology Steward*;

Illinois Federation of Teachers (IFT) Fellow; *Working Action Group Member*; *Communications Committee Member*

- Represented the Psychology Department in the Stewards Council.
- Mobilized membership in organized rallies and outreach campaigns.
- Recruited new members, led efforts to increase member participation, and coordinated events to facilitate contract bargaining operations.

Fall 2022 – present

Psychology Department – *Graduate Teaching Assistant*

- Primary point of contact for technical support and academic feedback; developed, presented, processed instructional material in classes of >100.

Fall 2021 – present

2024	Spring	PSYC 245 (<i>Industrial Organizational Psychology</i>)	Dr. Dan Newman
2023	Fall	PSYC 350 (<i>Personality Psychology Lab</i>)	Dr. Chris Fraley
	Spring	PSYC 245 (<i>Industrial Organizational Psychology</i>)	Dr. Dan Newman
2022	Fall	PSYC 250 (<i>Personality Psychology</i>)	Dr. Julia Briskin
		[Grading only] PSYC 207 (<i>Psychology of Prejudice and Discrimination</i>)	Dr. Chris Fraley
	Summer	PSYC 245 (<i>Industrial-Organizational Psychology</i>)	Dr. Christine Shenouda
	Spring	PSYC 455 (<i>Organizational Psychology</i>)	Dr. Yihao Liu
[Grading only] PSYC 144 (<i>Stereotypes, Prejudice, and Discrimination</i>)		Dr. Chris Fraley	
2021	Fall	PSYC 350 (<i>Personality Psychology Lab</i>)	Dr. Chris Fraley

Graduate Student Member (Psychology Department Diversity Committee)

- Coordinated university events and advised the Psychology Department Head on efforts to foster diversity, accessibility, and inclusivity.

Tutor (*Statistical Methods I and II*; Master's of Psychological Science program); *Exam proctor*

- Developed Master's-level instructional materials on statistical theory, factor analysis and producing data visualizations in RStudio.

Fall 2022 – Spring 2023

Spring 2019 – present

University of Central Florida

Transportation Research Group (TRG) – *Undergraduate Researcher, Administrative Assistant*

- Designed and administered driving and cognitive tasks; validated a newly designed cognitive task to serve as a manipulation in a study on distracted driving in drivers with working memory and attention deficit hyperactivity disorders.
- Managed scheduling and lab resources for participants and other researchers, as well as a website for the laboratory.
- Collected, coded, and analyzed participant data obtained from an electroencephalogram (EEG).

Orlando, FL

Fall 2015 – Summer 2018

Computational Psychology Lab – *Research Assistant*

- Meta-analyzed the Five Factor Model (FFM) of personality and its facets' relationships with leadership effectiveness and task performance.
- Conducted literature searches and reviews for journal articles; fetched relevant data from PsycINFO.

Spring 2016 – Summer 2017

Curriculum Vitae: JUAN M. ALZATE VANEGAS

Work	University of Illinois	State Farm
Addresses:	at Urbana-Champaign	State Farm Plaza SB2
	Psychology Building Room 236	Bloomington, IL 61710-0001
	603 E Daniel St, Champaign, IL 61820	juan.alzatevanegas.vaez4q@statefarm.com
	juanma3@illinois.edu	

EDUCATION

Largo High School (Largo, Florida), I.B. degree, June 2015.

University of Central Florida (Orlando, Florida), B.S. in psychology with honors and minors in statistics and computer science, August 2018.

University of Illinois (Urbana-Champaign, Illinois), M.S. in psychology, August 2020;
Ph.D. in industrial-organizational psychology (Expected graduation date: August 2024).

WORK EXPERIENCE

Research Intern: Organizational Insights Team, State Farm (Enterprise Research), Bloomington, IL.

- Presented quantitative insights about insurance claims severity and customer satisfaction for business leaders to make strategic decisions.
- Developed up-to-date educational materials for machine learning methods to improve research quality and efficiency.
- Designed an animated visualization of insights in talent acquisition for Hack Day 2023.

Teaching Assistant: University of Illinois, Urbana-Champaign, IL.

Developed and presented instructional materials; primary point of contact for technical support and academic feedback.

- Personality Psychology Lab, under Dr. Chris Fraley (Fall 2023)
- Industrial Organizational Psychology, under Dr. Daniel Newman (Spring 2023, 2024)
- Personality Psychology, under Dr. Julia Briskin (Fall 2022)
- Industrial Organizational Psychology, under Dr. Christine Shenouda (Summer 2022)
- Organizational Psychology, under Dr. Yihao Liu (Spring 2022)
- Stereotypes, Prejudice, and Discrimination, under Dr. Chris Fraley (Spring, Fall 2022)
- Personality Psychology Lab, under Dr. Chris Fraley (Fall 2021)

Tutor: University of Illinois, Urbana-Champaign, IL.

Developed Master's-level teaching materials on statistics, factor analysis, and data visualization.

- Master's of Psychological Science (MSPS), under Dr. Caroline Tancredy (Spring 2020)
- Statistical Methods I and II, under professor Frieder Köhn (Spring 2019 – Fall 2022)

Ad Hoc Reviewer: Military Psychology.

Peer-reviewed 10 manuscripts considered for publication.

RESEARCH INTERESTS

- Research and statistical methods, psychometrics, item response theory, computational approaches to psychological research (e.g., Big Data, machine learning, neural networks, natural language processing, social signal processing, simulations), meta-analyses, structural equation modeling.
 - Technological implications for the workplace, electronic monitoring, social media assessment, computerized adaptive testing, virtual teams, ergonomics and human factors.
 - Self-efficacy, stress, motivational interventions, job satisfaction, employee attitudes, occupational commitment, counterproductive work behavior, turnover.
 - Individual differences, personality theory, intelligence, theories of cultural influence.
 - Leadership styles and effectiveness, leadership emergence, leadership-member exchange.
 - Performance measurement, appraisals, 360-degree feedback systems, job analyses, selection assessment and placement.
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WORKS IN PROGRESS

1. Alzate Vanegas, J.M., Drasgow, F., Briley, D.A., Fraley, R.C., Zhang, B., & Zhang, S. (2024). Expressions of personality and job attitudes on Twitter. [Doctoral dissertation, University of Illinois]. Manuscript in preparation.
 2. Alzate Vanegas, J.M. (n.d.). Who's citing who?: Applications of network analysis to uncover seminal articles in *The Journal of Applied Psychology*. [University of Illinois]. Manuscript in preparation.
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PUBLICATIONS

1. Alzate Vanegas, J.M., Drasgow, F., & Wine, W. (2022). Predictions of attrition among U.S. Marine Corps: Comparison of four predictive methods. *Military Psychology*, 2(34), 147-166. doi: 10.1080/08995605.2021.1978754
2. Alzate Vanegas, J.M. & Drasgow, F. (2020). Classification trees outperform logistic regression predictions of attrition in the U.S. Marines Corps [Master's thesis, University of Illinois]. *Illinois Digital Environment for Access to Learning and Scholarship (IDEALS)*. <http://hdl.handle.net/2142/108465>
3. Alzate Vanegas, J.M. (2018). Psychometric properties of a working memory span task. *Honors Undergraduate Theses*. 358. <http://stars.library.ucf.edu/honorsthesis/358>

PRESENTATIONS

1. Alzate Vanegas, J.M., Drasgow, F., Briley, D.A., Zhang, B., Zhang, S. & Vogiatzis, C. (April 2024). *The digital reflection: Expressions of personality and job attitudes on Twitter*. Poster presentation at the 2024 SIOP Annual Conference, Chicago, IL.
2. Alzate Vanegas, J.M. (March 2024). *The digital reflection: Expressions of personality and job attitudes on Twitter*. STAR Talk for State Farm Enterprise Research (ER) team, Bloomington, IL.
3. Alzate Vanegas, J.M. (February 2024). *Sprinklr for social media*. Presentation for the State Farm Enterprise Research (ER) Experience Linkage Analytics (ELA) initiative, Bloomington, IL.
4. Alzate Vanegas, J.M. (February 2024). *Git in a nutshell*. Presentation for the State Farm Enterprise Research (ER) Experience Linkage Analytics (ELA) initiative, Bloomington, IL.
5. Dubois, H., & Alzate Vanegas, J.M. (August 2023). *2023 Organizational Insights (OI) summer intern experiences*. STAR Talk for State Farm Enterprise Research (ER) team, Bloomington, IL.
6. Alzate Vanegas, J.M. & Hirvo, A. (June 2023). *Employee performance projections*. Presentation for State Farm Enterprise Research Hack Day 2023, Bloomington, IL.
7. Alzate Vanegas, J.M. (May 2023). *A network analysis of The Journal of Applied Psychology*. Final project for Statistical Learning in Behavioral Sciences, Urbana, IL.
8. Alzate Vanegas, J.M. (April 2022). *Turnover in the US Marines: Comparison of predictive methods*. Poster presentation at the 2022 SIOP Annual Conference, Seattle, WA.
9. Alzate Vanegas, J.M. (April 2019). *Inferring personality from social media*. Presentation at the Social-Personality-Organizational (SPO) Brown Bag, Urbana-Champaign, IL.
10. Alzate Vanegas, J.M., Hurst, M.T., & Perez, I. (April 2018). *Psychometric properties of a working memory span task*. Poster presentation at the Southeastern Human Factors Applied Research Conference, Clemson, SC.
11. Alzate Vanegas, J.M., Hurst, M.T., & Perez, I. (March 2018). *Psychometric properties of a working memory span task*. Poster presentation at the annual Showcase of Undergraduate Research Excellence, Orlando, FL.
12. Alzate Vanegas, J.M., Scott, D., Tilus, N., & Thompson, G. (April, 2017). *Test anxiety and native language*. Virtual poster session for Advanced Research Methods in Psychology, Orlando, FL.
13. Louie, J. F., Alzate Vanegas, J.M., & Mouloua, M. (April, 2017). *Does the type of distraction matter? Working memory capacity as a predictor of distracted driving*. Poster presentation at the 1st annual Southeastern Human Factors Applied Research Conference, Raleigh, NC.
14. Alzate Vanegas, J.M. (April, 2016). *Leadership and personality theory: an introduction*. Presentation at the last meeting of the year for the Transportation Research Group, Orlando, FL.