JOSHUA E. LAMBERT, PHD

JoshuaE.Lambert@gmail.com | Website (JELambert.com)

Work Experience

Senior Machine Learning Engineer and Manager

2022 - Current

Factset - Data Solutions AI Team

- Construct and manage a scaled graph product that has hundreds of millions of nodes and billions of relationships.
- Designed and architected LLM-based GenAI solutions on top of multi-faceted data products for the financial sector.

AI Solutions Consultant

2015 - Current

Cypress Synergy LLC

- Forecast turnout and favorable voter identification in election campaigns. Manage teams aimed at mobilization efforts.
- Provide a range of data services to both public and private sector clients including DB architecture design, web-scraping, and ML/NLP applications.
- \circ Founded and established $Cypress\ Synergy\ LLC$ for statistical and data-driven strategic growth.
- Provide mentorship and developmental workshops to aspiring quantitative scholars and data scientists pro-bono.

Machine Learning Engineer, NLP

2021 - 2022

SparkCognition Government Systems

- Design and implement AI-NLP solutions for defense customers across a range of sectors.
- Generate scalable pipleines for vectorization and search functions in the NLP space.
- Deploy DeepLearning tools for nuanced contextulization of unstructured data.

ML/NLP Data Scientist - Postdoctoral Scholar

2020 - 2021

National Center for Integrated Coastal Research

University of Central Florida

- Led a team of researchers in the design of a conceptual framework for distilling cross-sectional and longitudinal variation and subsequent model deployment.
- Implemented NLP pipeline including NN architecture and out-of-sample two-step ensemble classification of determinants for coastal adaptation strategies to climatic conditions.

Research Associate

University of Central Florida

Intelligence Community's Center for Academic Excellenc

2016 - 2019

Kurdish Political Studies Program

2020

- Managed team of researchers on the design and development of a longitudinal, cross-national leader speech materials database. Applied NLP and machine learning methods.
- Created website for the open access of data at: Psychological Characteristics of Leaders (PsyCL). Selected to present research at International Society for Political Psychology conference.
- Deployed linear models to uncover trends in historical effects of religious characteristics on global instances of civilian victimization, terrorism, and episodes of genocide. General anomoly detection in the localized conflict space.

Researcher 2018

Secure Fisheries One Earth Future

 Collaborated with interdisciplinary scientists on design and implementation of the Fisheries Conflict Database. Managed SQL database, conducted natural language processing and data analysis using Python.

Education

| PhD University of Central Florida, Security Studies | 2016 - 2020 |
|---|-------------|
| MA University of New Orleans, Political Science | 2014 - 2015 |
| BA Auburn University, Political Science | 2010 - 2014 |

Professional Skills

Technical Skills: Python, PyTorch, AWS, Azure, Elastic Stack, SQL/NoSQL, ArcGIS, Git

Theoretical Skills: LLM, GenAI, Machine Learning, Natural Language Processing, Deep-Learning, Hypothesis Testing, Time Series, Econometric modeling, Agile methodology, DB Management, Spatial Analysis, Research Design, Survey and Experiment Design, Experienced oral and written communicator.

Team and Leadership Skills: Collaborative publications with interdisciplinary scientists. Managed teams of researchers, guided project design and implementation of data collection and analysis. Held several elected leadership positions including Student Government Vice President.

Publications

6 peer-reviewed | 1 book chapter | Google Scholar 2 policy reports | 4 popular articles

- 13. Cullen Hendrix, Sarah M. Glaser, **Joshua E. Lambert**, and Paige Roberts, "Global climate, El Niño, and militarized fisheries disputes in the East and South China Seas", *Marine Policy*, **2022**.
- 12. Mark Schafer and **Joshua E. Lambert**, "Psychological Characteristics of Leaders (PsyCL): Introducing a New Data Set", *Foreign Policy Analysis*, **2022**.
- 11. Sarah M. Glaser, Colleen Devlin, **Joshua E. Lambert**, and Ciera Villegas, "The Causes and Consequences of Fisheries Conflict around the Horn of Africa", *Journal of Peace Research*, **2021**.
- Christopher M. Faulkner, Joshua E. Lambert, Bruce M. Wilson, and Matthew S. Faulkner, "The Human Right to Water and Sanitation: Using Natural Language Processing to Uncover Patterns in Academic Publishing" Water, 2021.
- 9. **Joshua E. Lambert**, Graham Epstein, Jennifer Joel, and Jacopo Baggio. "Identifying Topics and Trends in the Study of Common-Pool Resources Using Natural Language Processing", *International Journal of the Commons*, **2021**.
- 8. Joshua E. Lambert, Mark Schafer, Stephen Walker, and Collin Kazazis, "Presidential Personalities and Operational Codes: Learning Effects and Midterm Congressional Election Results", Book Chapter in Operational Code Analysis and Foreign Policy Roles Crossing Simon's Bridge, 2021.
- 7. **Joshua E. Lambert** and Anthony Licciardi, "What belief in extraterrestrial visitors to Earth reveals about trust in elections", *The Conversation*, **2021**.
- 6. Christopher M. Faulkner, **Joshua E. Lambert**, and Jonathan Powell, "Reassessing Private Military and Security Company(PMSC) 'Competition' in Civil War: Lessons from Sierra Leone" *Small Wars and Insurgencies*, **2019**.
- 5. Eric Keels, Jay Benson, John Filitz, and **Joshua E. Lambert**, "Reassessing Rebellion", *One Earth Future*, **2019**.
- 4. Eric Keels and **Joshua E. Lambert**, "Why Sudan's deadly crackdown on protesters could escalate in coming weeks", *The Conversation*, **2019**.
- 3. Christopher Faulkner, **Joshua E. Lambert**, and Jonathan Powell, "Peeling back the layers on the role of private security companies in Africa", *The Conversation*, **2019**.
- 2. Sarah M. Glaser, Colleen Devlin, **Joshua E. Lambert**, Ciera Villegas, and Natasia Poinsatte, "Fish Wars: The Causes and Consequences of Fisheries Conflict in Tanzania", *One Earth Future*, **2019**.
- 1. Clayton Besaw, **Joshua E. Lambert**, and Jean-Pierre Larroque, "Rulers, Elections, and Irregular Governance (REIGN) Showcase: Part I", *One Earth Future*, **2018**.

4 Working manuscripts, (2 under review)

- 4. Joseph F. Hair, Jr., Ermanno Affuso, **Joshua E. Lambert**, Michail Tsagris, Bradford Tuckfield, "Contemporary Business Analaytics"
- 3. Christopher Faulkner, **Joshua E. Lambert** and Rebecca Schiel, "Coup-Proofing, Mutinies, and Private Military and Security Companies", *Under Review*
- 2. Güneş Murat Tezcür and **Joshua E. Lambert**, "Global Patterns in Religion and Large Scale Violence"
- 1. **Joshua E. Lambert**, "Them Belly Full but We Hungry: Food Insecurity as an Elite Motivator for Coups"

Teaching

Global Scholar

University of South Alabama, Mobile | Mitchell College of Business

ML/AI for Business Analaytics

PhD Course

Fall 2023

2016-2018

Adjunct Lecturer/Instructor of Record (e.g., Jupyter notebook.)

University of Central Florida, Orlando | School of Politics, Security, and International Affairs

GIS for Political Analysis

Fall 2019, Spring 2020

Student evaluation: Course = 4.71/5 | University Average = 4.16/5

Graduate Teaching Assistant

University of Central Florida, Orlando | School of Politics, Security, and International Affairs

Courses included:

International Relations, Comparative Politics, Geography, Political Science, Public Policy Faculty evaluation: Very Satisfactory

Presentations

15 invited conference presentations

- o 2022 International Studies Association (Nashville, TN)
- 2021 International Studies Association (Remote), American Political Science Association (Seattle, WA)
- o 2020 International Studies Association (Cancelled Honolulu, HI)
- o 2019 International Studies Association (Toronto, CAN)
- o 2018 Southern Political Science Association (New Orleans, LA)
- 2017 Florida Political Science Association (Orlando, FL); Southwestern Political Science
 Association (Austin, TX); International Society of Political Psychology Association (Edinburgh, SCT); International Studies Association South (Orlando, FL)
- ° 2014 Alabama Political Science Association (Montgomery, AL); Southern Political Science Association (New Orleans, LA)
- o 2013 Alabama Political Science Association (Tuscaloosa, AL)

Awards, Outreach and Service

| ViEWS Conflict Forecasting Competition invited participant – Uppsala, SWE | 2020 |
|---|---------------------|
| PRIO Conflict Trends Course participant – Oslo, NOR | 2018 |
| President, Political Science Graduate Student Association (UCF) SciPy conference workshop participant – Austin, TX | 2018 - 2019 2018 |
| GEOINT Symposium participant – Tampa Bay, FL | 2018 |
| DIA Summer Seminar participant – Washington D.C. | 2017 |
| UCF Political Science Colloquium presenter – Orlando, FL | 2017 |
| Florida Political Science Graduate Paper Winner – Orlando, FL | 2017 |
| ISPP Summer Methodology Academy participant – Edinburgh, SCT | 2017 |
| UNO Student Government Senator of the year – New Orleans, LA | 2015 |
| Vice President, Student Government Association (UNO) | 2015 |
| Member, Dean Search Committee (UNO) | 2015 |
| Senator, Student Government Association (UNO) | 2014 - 2015 |