

AI Day for Federal Statistics: CNSTAT Public Event

May 2, 2024

National Academy of Sciences Building
2101 Constitution Avenue NW, Washington, DC

PROGRAM

Location: Fred Kavli Auditorium

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| 10:00am–10:10am | Introductory Remarks
Katharine Abraham, University of Maryland, College Park & CNSTAT
Chair |
| 10:10am–10:30am | Federal Statistics at the Forefront of Artificial Intelligence
Karin Orvis, Chief Statistician of the United States, Office of Management
and Budget |
| 10:30am–12:00pm | Panel on Cross-Cutting Issues Related to AI Adoption in the
Federal Statistics System <i>(speakers will have up to 20 minutes for
their remarks)</i>

Statistics at the AI Leadership Table
Chris Marcum, Office of Management and Budget

Confidentiality Protection in AI
Xiao-Li Meng, Harvard University

Moving AI Tools into Government
Nadia Fawaz, White House Presidential Innovation Fellows

Return on Investment (ROI) on AI
Kent Cunningham, Microsoft Federal |
| 12:00pm–1:30pm | Lunch break |
| 1:30pm–2:30pm | The Future of AI in Federal Statistics
Nancy Potok, NAPx Consulting LLC |
| 2:30pm–2:45pm | Break (move to breakout rooms) |

Location: Various Rooms

2:45pm–4:00pm **Topical Breakout Sessions** *(all sessions concurrent, speakers will have up to 20 minutes for their remarks followed by audience Q&A and discussion)*

- 1) Use of AI in the Survey Process** *(Room 120)*
 - ♦ Gizem Korkmaz, Westat
 - ♦ Michael Link, Ipsos
 - Moderator:* Minsun Riddles, Westat
- 2) Record Linkage and AI** *(East Court)*
 - ♦ Carla Medalia, Census Bureau
 - ♦ Cordell Golden, National Center for Health Statistics
 - Moderator:* Keenan Dworak-Fisher, Bureau of Labor Statistics
- 3) Building the Future: Leveraging the National AI Research Resource and National Secure Data Service for AI Capabilities** *(Lecture Room)*
 - ♦ Katerina Antypas, National Science Foundation Office of Advanced Cyberinfrastructure
 - ♦ Lisa Mirel, National Center for Science and Engineering Statistics
 - Moderator:* Travis Hoppe, Office of Science and Technology Policy
- 4) Statistical Core of AI** *(West Court)*
 - ♦ Tian Zheng, Columbia University
 - ♦ Hongtu Zhu, University of North Carolina at Chapel Hill
 - Moderator:* Rebecca Nugent, Carnegie Mellon University
- 5) Current Scope of AI Implementations** *(Auditorium)*
 - ♦ Ken Haase, Census Bureau
 - ♦ David Oh, Bureau of Labor Statistics
 - Moderator:* Bob Siviniski, Office of Management and Budget
- 6) Quantifying Uncertainty Due to AI** *(Room 125)*
 - ♦ Lucas Janson, Harvard University
 - ♦ David Matteson, National Institute of Statistical Sciences and Cornell University
 - Moderator:* Nicholas Rios, George Mason University
- 7) Ethics in AI** *(Members Room)*
 - ♦ Rochelle Tractenberg, Georgetown University
 - ♦ Michael B. Hawes, Census Bureau
 - Moderator:* Mark Prell, Economic Research Service
- 8) AI and Blended Data** *(Board Room)*
 - ♦ H. V. Jagadish, University of Michigan
 - ♦ Elizabeth Stuart, Johns Hopkins University
 - Moderator:* Brian Habing, National Institute of Statistical Sciences and University of South Carolina

Location: West Court and Great Hall

4:00pm–5:00pm **Poster Session and Reception**

Location	Poster Title	Presenter
P1	Setting the Foundation for AI Usage in Regional Statistics	Nicholas Wetzler Bureau of Economic Analysis
P2	Offense Text Autocoder	Suzanne Strong Bureau of Justice Statistics and RTI
P3	Clustering Federal Register Comments for Efficient, Manual Review	Brandon Kopp Bureau of Labor Statistics
P4	Machine Learning Classification of Product Categories in Scanner Data used CPI	Brendan Williams Bureau of Labor Statistics
P5	AI Institute for Societal Decision Making	Rebecca Nugent Carnegie Melon University
P6	Using Artificial Intelligence Tools to Automate Manual Data Processing and Generate Alternative Data Sources	Haley Hunter-Zinck U.S. Census Bureau
P7	Automated Change Detection for MAF/TIGER	Elvis Martinez U.S. Census Bureau
P8	Classifying Consumer Ultra-Processed Food Intake Using NLP and Convolved Neural Networks	Mariah Ehmke Economic Research Service
P9	Capture-Recapture in the Age of AI	Habtamu K. Benecha National Agricultural Statistics Service
P10	Using Machine Learning Algorithms to Identify Farms on the 2022 Census of Agriculture	Gavin Corral National Agricultural Statistics Service
P11	A Natural Language Processing Examination of Stress and Financial Wellbeing in Consumer Complaints	Rebecca Martin Consumer Financial Protection Bureau
P12	Expanding Text Analysis Use at EIA	Mark Schipper Energy Information Administration
P13	Use of AI and Impact on Employees: Data From the 2022 Annual Business Survey	Alexander Rhodes National Center for Science and Engineering Statistics
P14	Classification of Open-Ended comments From Surveys Based on XGBoost and Natural Language	Lu Chen National Institute of Statistical Sciences
P15	Automating Declassification and FOIA Requests: When AI Leads to Increased Government Transparency	Sam Stehle State Department
P16	Imputing Measures of Diet Quality using Circana Scanner Data	Alexander Stevens Economic Research Service

Location	Poster Title	Presenter
P17*	Measuring and Analyzing Community- and Officer-Initiated Activity	Jacob Cramer Bureau of Justice Statistics and RTI
P18*	Unsupervised LLM Topic Modeling for Enhanced Federal Survey Interpretation	Irina Belyaeva U.S. Census Bureau
P19	Tracking Firm Use of AI in Real Time: A Snapshot from the Business Trends and Outlook Survey	Cory Breaux U.S. Census Bureau
P20	Autocoder for OCWC and OEWS	Sertan Akinci Bureau of Labor Statistics
P21	CE Diary Autocoder	Melissa Pollock Bureau of Labor Statistics
P22	Explainable Artificial Intelligence for Bias Identification and Mitigation in Demographic Models	Atul Rawal U.S. Census Bureau
P23	A Semi-Supervised Active Learning Approach for Block-Status Classification.	Atul Rawal U.S. Census Bureau
P24	Corn Yield Prediction Using Remote Sensing Observations and Multi-Source Unsupervised Domain Adaptation	Zhengwei Yang National Agricultural Statistics Service
P25	Using Neural Networks to Assess Uncertainty for the Imputation of an Area Survey	Luca Satore National Agricultural Statistics Service
P26	Using Data for Training and Validating ML Prediction Models and Explainable AI	Orlando Davy National Center for Health Statistics
P27	Using AI and ML to Identify Non-Name Text in Name Fields that Should be Removed Prior to Linkage	Frances McCarty National Center for Health Statistics
P28	Implementing Retrieval-Augmented Generation with Survey Question Evaluation Reports	Priyam Patel National Center for Health Statistics
P29	AI-Powered Synthetic Data Generation: Algorithms, Artifacts, Analyses	Gary Howarth National Institute of Standards and Technology
P30	Mixed Modeling Approach for Characterizing the Genetic Effects in a Longitudinal Phenotype	Pei Zhang National Institutes of Health, Graduate Partnership Program
P31	AI in Psychometrics: Estimating Factor Loadings with ChatGPT	J. Peter Leeds Office of Personnel Management
P32	A Comparative Analysis between AI and Human Coding in Survey Research	Isabela Bertolini Coelho University of Maryland-JPSM