Artificial Intelligence
COMMUNITY OF PRACTICE

Artificial Intelligence Community of Practice

ANNUAL REPORT

October 2022 – September 2023

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Welcome Letter – from leadership

Dear Members of the AI Community of Practice,

As an Assistant Commissioner of the Technology Transformation Services, it is my pleasure to welcome you to the Artificial Intelligence Community of Practice (AI CoP) Annual Report for Fiscal Year 2023. This year has been a landmark for the community, witnessing significant growth in membership, the facilitation of numerous impactful events, and the development of vital platforms and resources for the federal government.

The AI CoP, a grassroots entity, has continued to play a crucial role in disseminating information on AI programs, pilots, and initiatives across federal agencies. Our focus this year, informed by your invaluable feedback, has been on enterprise-wide governance, policy, workforce development, data infrastructure, and technology tools. These areas are foundational to the responsible adoption and effective use of AI in government operations.

As we reflect on the achievements of the past fiscal year and look towards the future, we remain committed to the mission of fostering a knowledgeable and collaborative community. The work done here is vital to ensuring that artificial intelligence is used responsibly and effectively across the federal government. Thank you for your dedication and contributions to this important endeavor.

Warm regards,

Jennifer Rostami
Assistant Commissioner, Technology Transformation Services

FY 2023: A Year of Transformative Growth and Innovation

The Federal Artificial Intelligence Community of Practice (AI CoP) unites a diverse and dynamic group of 2,895 federal employees, ranging from hands-on practitioners to visionary managers and executives. Established under the auspices of the AI in Government Act of 2020, the AI CoP serves as a pioneering grassroots platform, dedicated to enriching the federal landscape with cutting-edge AI knowledge. Our community thrives on sharing and discussing a wealth of information, encompassing innovative programs, groundbreaking pilots, and the latest initiatives across various agencies. We also delve into emerging trends and essential insights that foster a deeper understanding and practical adoption of AI technologies.

This year, guided by the valuable feedback and insights of our community members, the AI CoP has strategically directed its programming to address the most pressing needs and interests in the field. Our focus has been on enhancing collaborative learning, sharing best practices, and exploring novel approaches to leverage AI for transformative outcomes in government operations.

Government-Wide Training   **Agency Efforts**   **Working Groups**   **Challenges**

Steering Committee Members

Gil Alterovitz, Veterans Affairs

Sanja Basaric, Department of Defense

David Danks, University of Southern California - San Diego

Gio Altamirano, Department of State

Luke Keller, U.S. Census Bureau

Jen King, Stanford University

Krista Kinnard, National Aeronautics and Space Administration

Kate McCall-Kiley, U.S. Census Bureau

Working Group Leads

Natural Language Models
- Isabel Metzger, General Services Administration
- Dewayne Whitfield, Department of Energy
- Sai-Cheong Chu, Federal Housing Finance Agency

Responsible AI
- Leo Meister, Department of Health and Human Services
- Marian Adly, Veterans Affairs

Computer Vision
- David Kuehn, Department of Transportation
- Asif Mehmood, Department of Defense

AI CoP Leadership

Eric Ewing, Managing Director
AI Centers of Excellence

Nathan Manzotti, Co-Manager
AI Community of Practice

Ryan Dolan, Co-Manager
AI Community of Practice

Eboni Freeman, Presidential Innovation Fellow
GSA Communities of Practice

FY23 At a Glance

The AI CoP had a significant year in growing memberships and events, maturing processes, and developing additional platforms and resources for the federal government community.

2895 MEMBERS
137.5% growth in FY23

90 AGENCIES
REPRESENTED IN COP MEMBERSHIP

27 GOVERNMENT-WIDE EVENTS
representing individuals from agencies, industry, Federal laboratories, nonprofit organizations, institutions of higher education, and other entities to discuss recent developments in artificial intelligence

8000+ FEDERAL EMPLOYEES FROM OVER 200 AGENCIES
registered for the 2nd Stanford Human-Centered Institute training series

3 WORKING GROUPS with focus on Responsible AI, Natural Language Processing, and Computer Vision

2 APPLIED AI CHALLENGES Healthcare and Large Language Models — aimed at actively involving the AI industry in the collaborative sharing of their advancements in technology and tools within the field of AI

A Closer Look

| Impact	Description	Outcomes
2,895 Community Members	The AI CoP has 2,895 community members and increased by 137.5% in FY23 with 1,676 new members.	Increased AI literacy and awareness in the federal government.
90 Agencies Across Federal and Local Government	The AI CoP represents 90 federal and local government agencies.	Increased insights and contributions from across the government.
27 Government-Wide Events	In 2023, the AI CoP facilitated 27 government-wide events that featured the subject-matter-expertise, trailblazing use-cases, and the latest AI trends in government. Events included: • A Department of State Use Case demonstrating customized Chatbot capabilities • A record-breaking Stanford AI Training Series with 6 sessions	Education and awareness on AI topics, cross-government guidance and policy, and use cases.
3 Working Groups	The 3 working groups included Responsible AI, Natural Language Processing, and Computer Vision. These working groups meet regularly to discuss best practices, tools, and resources within their respective fields, and to create and share resources for others. In 2023, the working groups published: • AI Governance Toolkit • Data Model Cards	Increased cross-government toolkits and share best practices to support the responsible deployment of AI across the government.

Stanford AI Training Series	After long-term strategic coalition building, the Stanford University Institute for Human-Centered AI (HAI) designed an educational program tailored to meet the unique needs of the AI CoP and the requirements from the AI Training Act.	Equipped federal employees with knowledge to help develop a well-informed approach to the implementation and governance of AI.
Applied AI Challenge	In 2023, the AI CoP hosted 2 Applied AI Challenges focused on Healthcare and Large Language Models. The challenges each received over 50 applications, and selected finalists to present leading AI technologies and use cases to agencies.	Enable increased AI maturity within agencies through industry information sharing . Connecting promising AI technologies with AI program offices.
AI Steering Committee	The AI Steering Committee, formed in 2022, is composed of AI experts across government and academia and provides ongoing guidance in the overall direction and programming for the CoP. The Steering Committee also re-developed the AI CoP vision and mission.	Programming validated by AI subject-matter-experts.
Monthly Newsletter	The AI CoP publishes a monthly newsletter that shares upcoming CoP events, resources as well as AI news across government and the globe. It has an 81% open rate and helped drive 7000+ visits to the website.	Insight and awareness into developments with AI in the CoP, the government, and the world.

Membership

Membership Growth by Fiscal Year
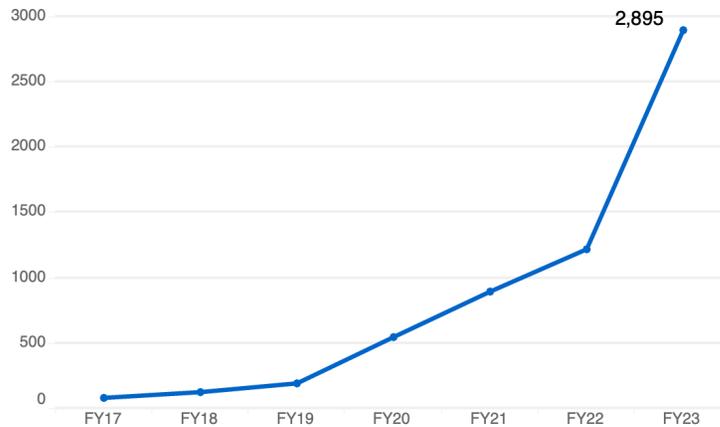
Membership	
Total Member Count	2895
FY23 New Members	1676
Community Growth	137%
Average Monthly Subscriptions	140
Top 3 Organizations Represented	
• Department of Health and Human Services	
• Department of Defense	
• General Services Administration	
Unique Agencies	90

In the fiscal year 2023, the AI CoP experienced a notable increase in membership, reflecting the ongoing success of our events and the growing interest in AI in the Federal Government. We began the year with 1219 members and concluded with 2895, representing a growth of 137%. This increase is a testament to our commitment to providing value and engaging experiences to our community. Notably, the month of September saw the most significant surge in new memberships. We attribute this growth to the large amount of interest in the Stanford AI Training Series.

Event Spotlight

Applied AI Challenge: Healthcare Industry Day (May 2, 2023)

GSA's Centers of Excellence launched the Applied AI Healthcare Challenge to assist federal agencies with the adoption of Artificial Intelligence and related technology to better serve the American people's healthcare system.

Members of the public who were eligible to participate in the Applied AI Healthcare Challenge provided informational product material outlining potential benefits to civilian agencies, software integrations, sample AI results datasets, and industry use cases that addresses one or more of the identified AI Healthcare focus areas: Mental Health, Addiction and the Opioid Epidemic, Equity, Supply Chain and Safety, or Cancer.

- Vendor submissions: 53 submissions (10 finalists selected)
- Registrations: 298 approved registrations
- Attendees: 164 total unique attendees, 145 government (including approved contractors) attendees
- Agencies Reached: 17 in attendance, 25 in registrations
- Average Attendee Duration Time: 114 minutes

Applied AI Healthcare Challenge Winners:
- Predicting Behavioral Emergencies in the Hospital — Duke Institute for Health Innovation
- The Healthy Selfie Digital Biomarker Platform — BioTrillion
- AIDANT: Using AI to Predict Inequity in Underserved Medicaid and Children Health Insurance Program Beneficiaries Under 19 Who are at Risk for Caries and Type 2 Diabetes — DATA DOC, MD LLC
- ProFound AI© Breast Cancer Detection and Personalized Risk Assessment — iCAD, Inc

Applied AI Challenge: Large Language Models (August 31, 2023)

The AI CoP launched the Applied AI Challenge: Large Language Models (LLMs) earlier this year inviting traditional and nontraditional large and small business entities to submit innovative solutions to improve operations and services across Government. The Applied AI Challenge focuses on the Administration's priorities to help agencies adopt LLMs for public benefit in areas like climate, equity, economy, and customer experience.

- Vendor submissions: 88 submissions (6 finalists selected)
- Registrations: 395 approved registrations
- Attendees: 236 total unique attendees, 168 Federal and State government (including approved contractors) attendees
- Agencies Reached: 40 in attendance, 46 in registrations
- Average Attendee Duration Time: 89 minutes

Applied AI LLM Challenge Winners:
- Large Language Model Detection Model - Topologe
- Solicitation Management And Request Tool (SMART) - SoKat
- Jibber Jabber: Empowering Humanitarian Efforts with Radio Frequency Data and Large Language Models - OZNI AI
- RPA-GPT: Natural Language Process-based Contract Robotic Process Automation Leveraging ChatGPT - AI Asset

Stanford HAI Training (Sept 18 - 28, 2023)

The Stanford University Institute for Human-Centered AI (HAI) tailored a government education program specifically for the U.S. General Services Administration's AI Community of Practice (CoP) to explore the latest in AI developments, equipping participants with knowledge needed to think critically about implementing and governing this emerging technology.

- 4,842 unique federal employees attended a HAI session, 13,598 total attendees across 6 sessions
- 2,266 average attendees per HAI session
  - 32% of attendees hold agency leadership roles
  - 69% of all attendees returned for 2 or more sessions
  - 83% satisfaction rating across all attendees
- "Understanding Foundation Models: Opportunities and Challenges" module had the highest attendance
- 1,035 new AI CoP members subscribed in September

"Members of our team joined together as a "watch party" - this was an excellent series! Technical and non-technical folks alike had great things to say." - Session Attendee

AI CoP Alignment to Policy

Founded in 2020 in collaboration with the Office of the Federal Chief Information Officer at the Office of Management and Budget (OMB), the Artificial Intelligence Community of Practice (AI CoP) has become a crucial player in implementing responsible AI across the federal government. This initiative was established following the AI in Government Act of 2020. With existing mandates like the Executive Order on Promoting Trustworthy AI (EO 13960) and the AI Training Act (Public Law 117-207), the AI CoP continuously adapts its programming to these directives. Initially, in FY20, the AI CoP's role was foundational, offering a platform for federal agencies to collaborate on AI adoption. By FY23, the role of AI CoP has expanded significantly. It now not only facilitates AI technology adoption but also boosts the federal workforce's understanding and skills in AI by showcasing its applications in federal agencies through various events and challenges. Additionally, it supports comprehensive AI education and training in collaboration with OMB and academic institutions, as required by the AI Training Act. These combined efforts are designed to serve the public interest and enhance the efficiency and productivity of government operations.

AI CoP Activities Aligned to Policy

FY23 Event	Executive Order 13960	AI in Government Act	AI Training Act
Stanford HAI Training Series (9/2023)	✓	✓	✓
Applied AI Large Language Models Challenge Industry Day		✓	✓
Responsible AI Workstream Presentation	✓	✓	
Responsible AI With Konstantin Berlin	✓	✓	
Responsible AI WG Session: Translating Trustworthy AI Principles	✓	✓	
DoL Use Case: Assessing Commercial AI Product for Responsibility	✓	✓	
Responsible AI: Monitoring ML Model Event	✓	✓	
Responsible AI: Towards Personalization without Harm Workshop	✓	✓	
Responsible AI Presents: AI for Neurological Care	✓	✓	
Computer Vision in Agricultural Production Systems		✓	
Computer Vision With Ritwik Gupta		✓	
CV Meeting: Community-based Flood Detection		✓	
Computer Vision: TruePAL - AI Assistant for First Responders		✓	
CV Event: Adaptive Multi-Vehicle Motion Counting		✓	
Applied AI Challenge: Healthcare - Industry Day		✓	
Language Models in the Loop			✓
NLP With Dr. Whitley Yi			✓
NLP Visioning Social			✓
NLP Toolkit Series			✓
Stanford HAI Training Series (10/2022)			✓
NAIRR TF Final Report Event	✓		
AI Diverse Panel Project Huddle	✓		
NIST Series - AI RMF Part III Event	✓		

References:
- Trump, Donald J. "Promoting the Use of Trustworthy Artificial Intelligence in the Federal Government." Federal Register, Executive Order No. 13960, 3 Dec. 2020, Sec. 3.
- Artificial Intelligence in Government Act." Congress.gov, Public Law No. 116-283, Stat. 116, 1 Jan. 2021, Sec. 2.
- "AI Training Expansion Act of 2023." H.R. 4503, 118th Cong., introduced 10 July 2023, Link

Vision

Responsible deployment of artificial intelligence is an integral and normalized practice, shaping the future of operations and decision-making within the U.S. Government.

Mission

To collectively build a knowledge base and inter-agency forum on best practices, tools, and resources that enable the federal workforce to responsibly deploy artificial intelligence and machine learning.
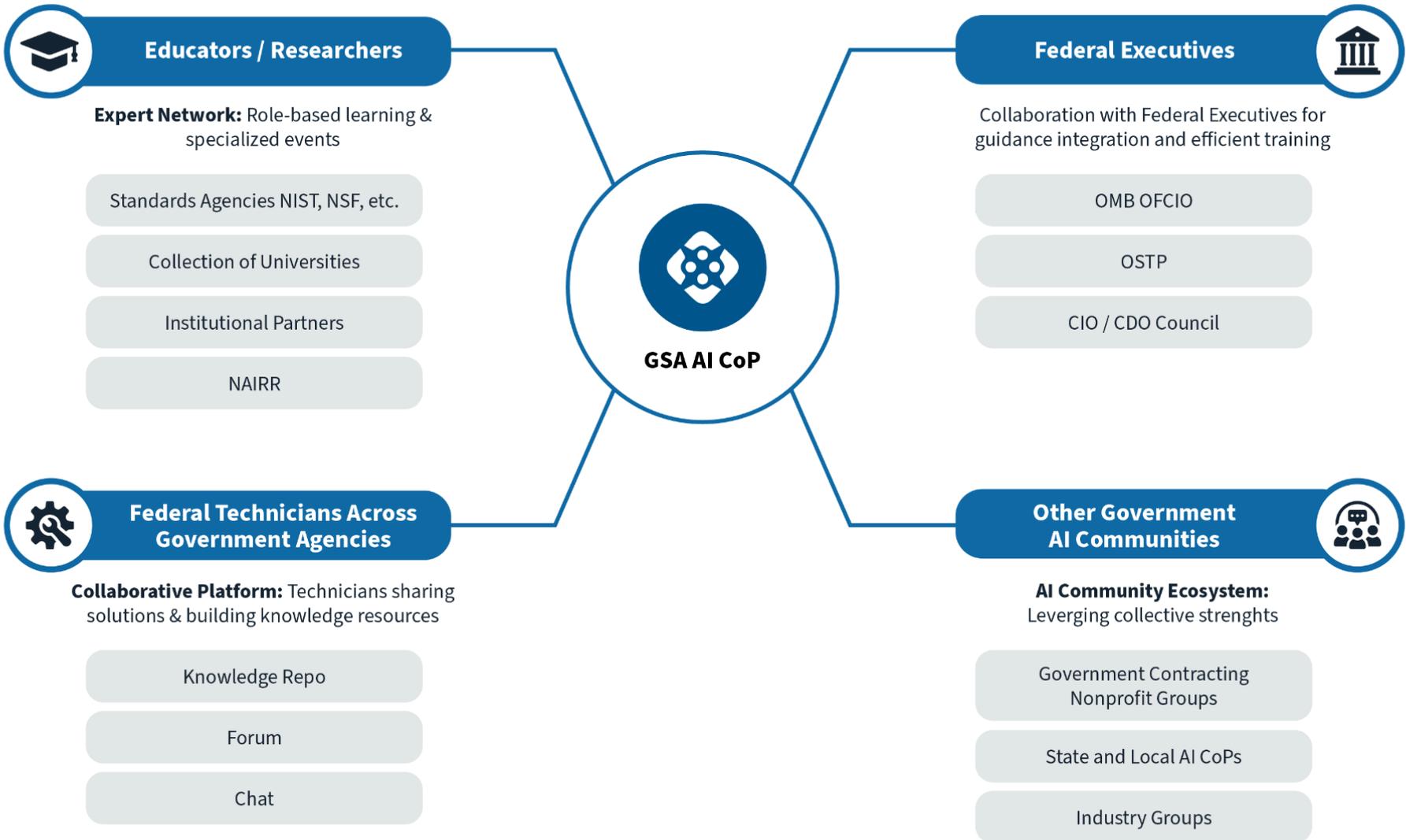
What to look for in FY24

1. **Applied AI Challenges:** Multiple Applied AI Challenges with a focus on agency use cases for AI.
2. **Community Driven - Agency AI Showcase Event Series**: A series to showcase AI projects happening across government.
3. **AI Training for Federal Employees**: More frequent opportunities for high-value AI training sessions provided to the community.
4. **Collaboration with Industry and Academia :** GSA AI CoP is connecting AI communities across government, industry, and academia to offer more value to members.
5. **Tools for interagency collaboration on AI projects**

The Future Vision for the GSA AI CoP FY24 and Beyond

The AI CoP aims to evolve into a global resource ecosystem, enabling responsible AI adoption within the federal government through collaborative community efforts.

The 4 key tenants of the expanded AI CoP include:
1. Collaboration with Federal Executives
2. Expert Network
3. AI Community Ecosystem
4. Collaborative Platform

Educators / Researchers

Expert Network: Role-based learning & specialized events

Standards Agencies NIST, NSF, etc.

Collection of Universities

Institutional Partners

NAIRR

Federal Executives

Collaboration with Federal Executives for guidance integration and efficient training

OMB OFCIO

OSTP

CIO / CDO Council

GSA AI CoP

Federal Technicians Across Government Agencies

Collaborative Platform: Technicians sharing solutions & building knowledge resources

Knowledge Repo

Forum

Chat

Other Government AI Communities

AI Community Ecosystem: Leveraging collective strenghts

Government Contracting Nonprofit Groups

State and Local AI CoPs

Industry Groups

Thank You

Thank you to Congress, our partners at the White House Office of Science and Technology Policy (OSTP), OMB, and to the community of AI practitioners both within and outside of government working to improve public service and spread the responsible adoption of AI across government.

We look forward to continuing to support the adoption of AI across the government.

For more information visit us at
https://coe.gsa.gov/communities/ai.html
or reach out to us at ai-cop-support-team@gsa.gov.