

Automating Declassification and FOIA Requests: When AI Leads to Increased Government Transparency

US Department of State A/GIS, M/SS/CFA, IRM/MSO

March 7, 2024





Declassification Review Program at A/GIS

Eric Stein, Deputy Assistant Secretary | Global Information Services (A/GIS)

Information Programs and Services(A/GIS/IPS)

Director: Timothy J. Kootz

- Administers the Department's records management, privacy, classification, declassification, and public access programs.
- Provides a range of services to both members of the Department and the public, in accordance with the Freedom of Information Act, the Privacy Act of 1974, the E-Government Act of 2002, Executive Order 13526 (Classified National Security Information) and related program legislation.

Systematic Review Program (A/GIS/IPS/SRP)

Division Chief: Jeffrey Charleston

 Manages the Department's information classification and declassification programs under Executive Order 13526 and associated regulations, statutes, and international agreements. **Key Partners**



- Center for Analytics (M/SS/CfA): All things data, analytics and AI.
- Messaging System Office (IRM/OPS/MSO): Infrastructure and systems for data/records.
- Other Federal Agencies: Collaboration and coordination.



Center for Analytics



D-MR and Chief Data and AI Officer Dr. Matthew Gravis sign the first-ever Enterprise Data Strategy (EDS)

Who We Are



M/SS/CfA is the Department of State's **enterprise data management and analytics capability.**

Led by the Chief Data and AI Officer, we **transform data into bold insights** to help make better management and foreign policy decisions.

Our Mission

Expand data access and grow analytic expertise across the Department globally, enabled through our data and technology platform called Data.State.

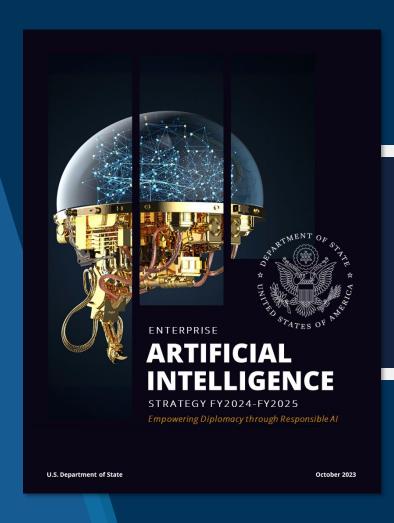
Who We Support

We empower employees across every bureau and in over 200 missions, from working-level to the Secretary.

We also want to go much further in using technology, innovation, and data to solve foreign policy challenges. We unveiled the State Department's first-ever enterprise data strategy last month... The Department has vast and diverse data sets, but we haven't done a good enough job making data available to you in a timely and useful way, to help you make mission or management decisions more effectively. We're changing that.

- Secretary of State Antony Blinken

Enterprise Al Strategy



EAIS

VISION

The Department of State will responsibly and securely harness the full capabilities of trustworthy artificial intelligence to advance United States diplomacy and shape the future of statecraft.

EAIS

GOALS & OBJECTIVES

- 1. Leverage Secure AI Infrastructure
- 2. Foster a Culture that Embraces AI Technology
- 3. Ensure AI is Applied Responsibly
- 4. Innovate

EAIS

DEVELOPMENT

Guided by the Office of Management Strategy & Solutions' Center for Analytics, the Fiscal Year 2024 through Fiscal Year 2025 EAIS is the product of the State Department's AI leaders and policy experts from over 25 bureaus and offices across the enterprise



Value of Responsible AI



Decision Advantage and Operational Efficiency

What Have We Done?

- ✓ Hired a Responsible AI Official (RAIO)
- ✓ Launched an AI Steering Committee
- ✓ Published FAM AI Policy

Overarching Federal Guidance

AI Executive Order

National Security
Memorandum (pending)

NIST AI Risk Framework

OMB Memorandum

Enterprise AI Strategy: Empowering Diplomacy Through Responsible AI

Vision

The Department of State will responsibly and securely harness the full capabilities of trustworthy AI

Goals

- 1 Leverage AI Infrastructure
- 2 Foster an AI Culture
- 3 Ensure AI is Applied Responsibly
- 4 Innovate

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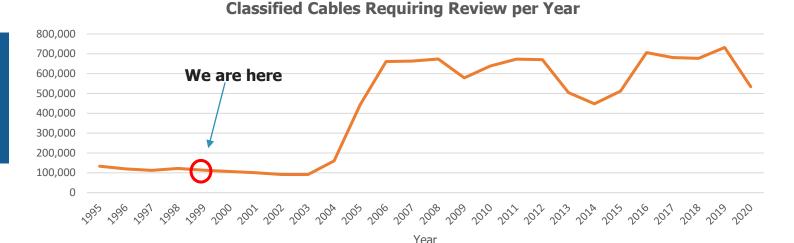
AI/ML Project Approach and Model Details





Mandated 25-Year Declassification Review

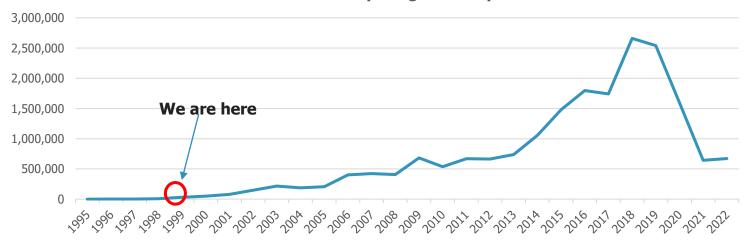
Executive Order 13526 requires that classified records are automatically declassified after 25 years, unless a review determines an exemption



BUSINESS PROBLEM

- A/GIS already spends significant labor on the 25-year ADR of classified cables
- Inability to review all cables by a year's end poses a national security risk to the Department
- Volume of cables for review is increasing, rendering manual review unsustainable
- Similar problems exist for classified emails and other electronic record types

Classified Emails Requiring Review per Year







Project and Solution Approach

Started small with a 3-month, limited scope pilot

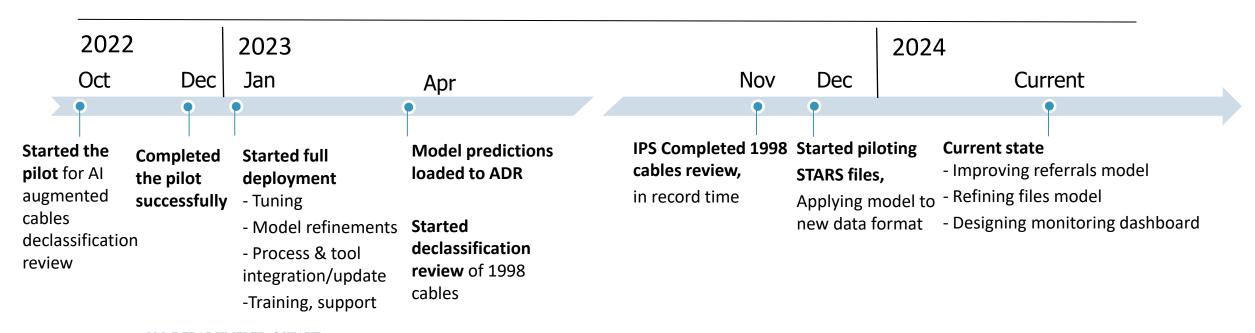
- Chose one electronic record type: cables
 - Cables are uniformly structured, readily available in eRecords
- Used 1995-1997 cables, already human reviewed (labeled data)

Used past decisions by human reviewers

 Trained ML models on past decisions by human reviewers (whether to "declassify" or "exempt from declassification")

Retained human review, not 100% automation (by design)

- Humans will always be in the loop to:
 - Review/label training data as necessary
 - Perform Quality Control (QC) checks
 - Review cables the model is unsure of
 - Pick up on topic drift over time







Declass Model Overview

Supervised ML

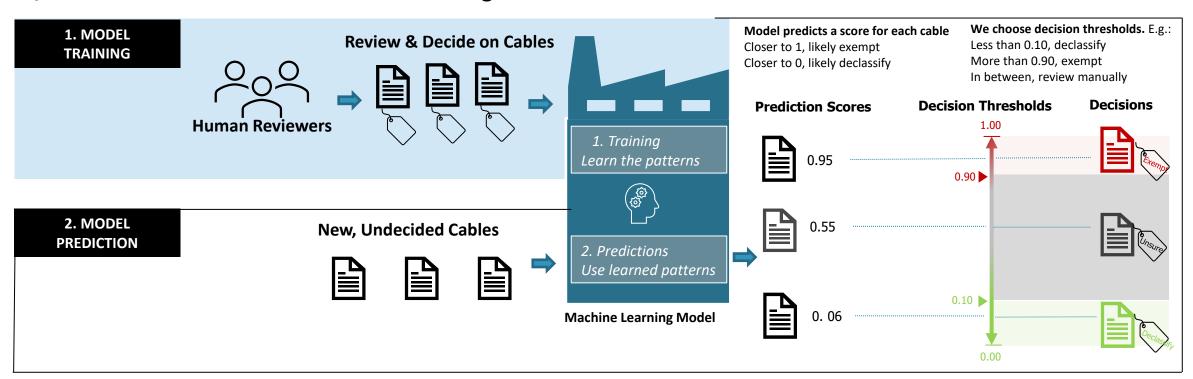
- Used three years of "labeled" cables as training data
- Trained the ML model to learn patterns in the training data
- On new cables, model predicts scores representing declassification or exemption

Supervised = We train it

Label = Human decision to declassify or exempt

Feature = word, phrase, metadata

AI/ML Model for Cable Declassification: Training and Predictions







Integration into the Current Manual Review Process

Model classifies cables into three groups:

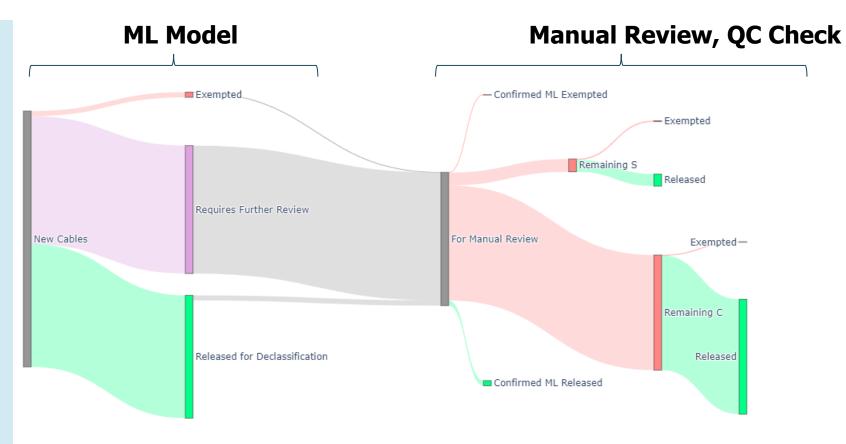
- Confidently Exempt
- Confidently Declassify
- o Requires manual review

Reviewers:

- QC a random sample of Exempt and Declassify groups of cables
- Manually review cables in the "Manual Review" group

Iterate (retrain, re-predict) based on human QC feedback loop to:

- Lower error rate and deliver more confident decisions
- Reduce volume of cables requiring
 Manual Review



Slide mentions only Declassify/Exempt model, but Exemption Reasons and Referral Agency models work similarly

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Deployment - Al Augmented Declassification Review of 1998 Cables

Total cables due for review: 121,536

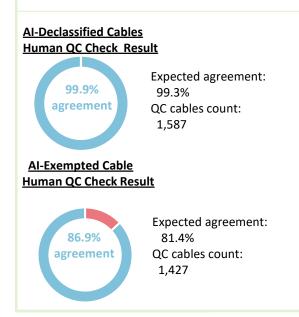
1. INITIAL MODEL PREDICTIONS

- Al model confidently predicted declassification or exemptions for 59% cables.
- 41% were left for manual review.
- A 2.5% random sample of predicted cables were flagged for human Quality Control (QC) check.

Al Confidently Declassified, 60% Al Confidently Exempted, 1%

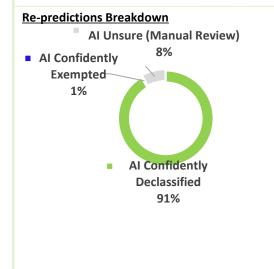
2. FIRST HUMAN QC CHECK

 First QC check by human reviewers showed that the observed accuracy of AI predictions were within acceptable limit and better than projected.



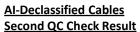
3. RETRAINING, RE-PREDICTIONS

- After retraining the model, it predicted more confidently.
- It confidently predicted on 92% of the remaining (unreviewed) cables
- Vastly reduced number of cables requiring manual review



4. SECOND HUMAN QC CHECK

- 1998 cables required human review on only 20% of cables.
- Model predictions were used for the rest, with the overall error rate expected to be approximately 1%.
- DOS completed annual declassification review of cables in record time and within the year.





Expected agreement: 99.0%
QC cables count: 2.037

AI-Exempted Cables Second QC Check Result



Expected agreement: 85.0%
QC cables count:

(*) Low performance resolved after reinforcing declassification policy with the reviewers

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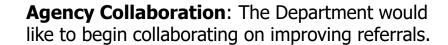


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ML for Cables Declassification: Current and Upcoming Goals

Direct Pilot and Release **implement** Proactively **ML** Declass release on other AI/ML declassified document improvements cables that have types Leverage new AI no referrals or e.g. retired file methods for other equities Impact archives technical (STARS), emails, improvements: other electronic **Operationalize** LLMs, ensemble file types models, outlier Apply model to models, etc. current year's review of cables; Integrate referrals models in processes

Current and Upcoming Goals





FOIA: We have begun a similar FOIA AI project to accelerate responses to FOIA requests using AI/NLP to reduce duplication of effort across cases and silos.



Emails: Millions of emails requiring review in the coming years. Have a scalable process and tool in place



Special Projects: Ad-hoc requirements for rapid decisions about highly visible issues.



Operationalize Direct Release: Establish process to publish *declassified* cables *with no PII or other equities* to DOS' FOIA Reading Room

- Final checkgate review; remove classification markings, etc.
- Release incrementally in manageably sized tranches.





FOIA AI: Background

FOIA Business Challenge

- Address increase in costs of FOIA processing and increasing backlog.
- Efficiently respond to increasing FOIA requests and reduce the burden that FOIA places on bureaus.
- Remove siloes between tools and teams that lead to inefficiencies, delays, and duplication of efforts.

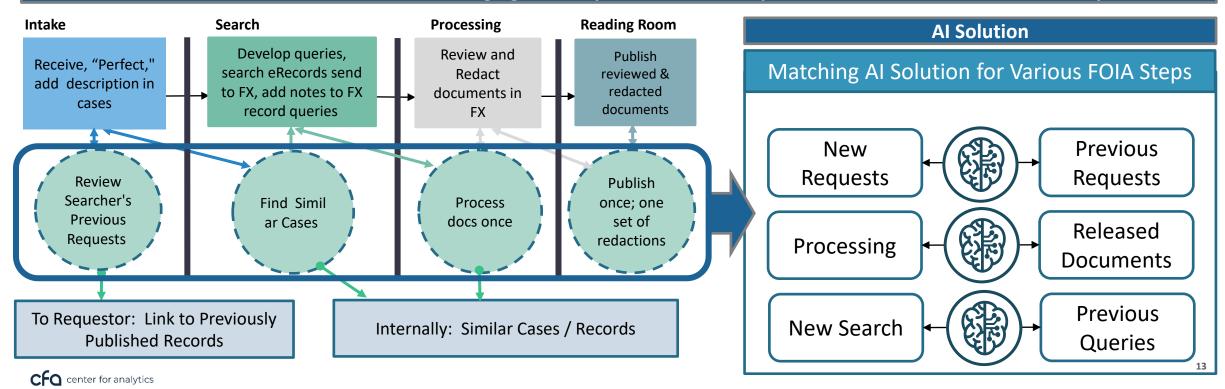
\$65 million FOIA Annual Costs

~20,000 Pending Cases

~15,000 New Requests

267 personnel FTE

Our Mandate: Areas of Focus for Leveraging AI to Improve Customer Experience and Review Process Efficiency







Unique Challenges with AI/ML and Solutions



- **Quality Concerns**
- Machine learning model may not perform as well as expected
- Model may have greater error rate than expected



 Engage process; quality control check by human reviewers of a random sample of ML results



Data Drift

- Ever-changing political & historical themes deteriorate model performance
- Left unchecked, the model will remain rigid & lose predictive power



 Frequent model retraining, tuning and human quality control to combat historical data drift



Imbalanced Data

- Few exemptions (<5%) compared to declassifications
- Most cables don't get referred to given agency
- Model doesn't have enough examples of minority classes to train on



Over/under sampling, outlier models to identify outliers



Model Explainability

- Model outputs decisions & confidence with little explanation
- Model makes pass/fail decision on entire cables, not subsections



 More detailed feature importance plus analysis of cable sections improve buy-in & transparency

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Process Improvements: Lessons Learned

Data Management



Data quality and accessibility are critical to any AI effort; the Department of State eRecords platform empowered the team to train, test, and deploy with high quality data

Continuously improve tools and processes with AI/ML features

Start Small



Start small, with a pilot. The experimental approach with well defined **performance metrics** helped the team measure improvement with each iteration.

One well-suited document type with manageable volume has helped the team scale their approach

Process Transformation



Consider early how AI/ML transformation will be incorporated into process and tools

Explore concurrent improvements to process
and tools, even if not related to
ML



Q&A

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