Government jobs
of the future

What will government work look like
in 2025 and beyond?

About the authors

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The Deloitte Center for Government Insights shares inspiring stories of government innovation, looking at what's behind the adoption of new technologies and management practices. We produce cutting-edge research that guides public officials without burying them in jargon and minutiae, crystalizing essential insights in an easy-to-absorb format. Through research, forums, and immersive workshops, our goal is to provide public officials, policy professionals, and members of the media with fresh insights that advance an understanding of what is possible in government transformation.

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ALGORITHM
AUDITOR

ALGORITHM AUDITOR

Summary

Government agencies use algorithms to inform a wide variety of decisions, from building inspections to benefits programs applications. But some algorithms have been found to be biased against certain racial, gender, and class groups. There are also examples of algorithmic models that are so complex that their developers are not sure why a model is making particular recommendations. These algorithmic challenges, along with data privacy issues, have created the need for the role of algorithm auditor in the public sector.
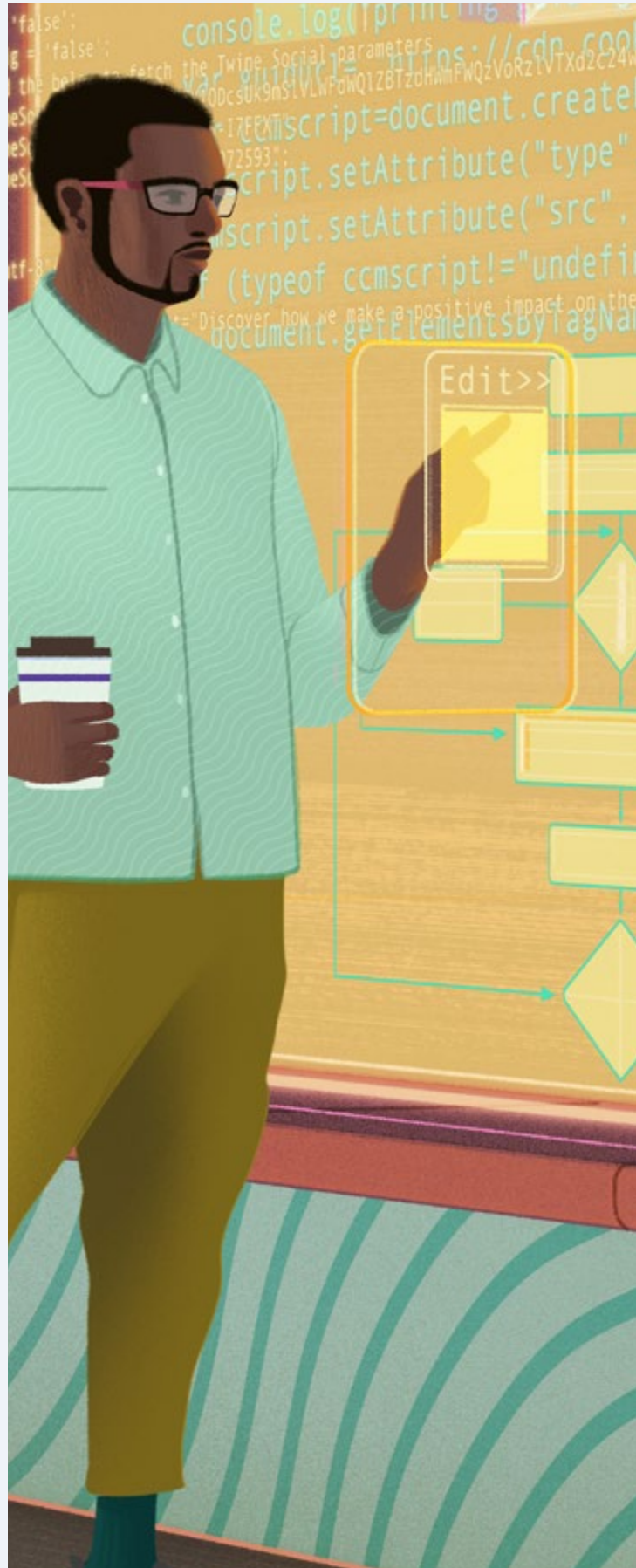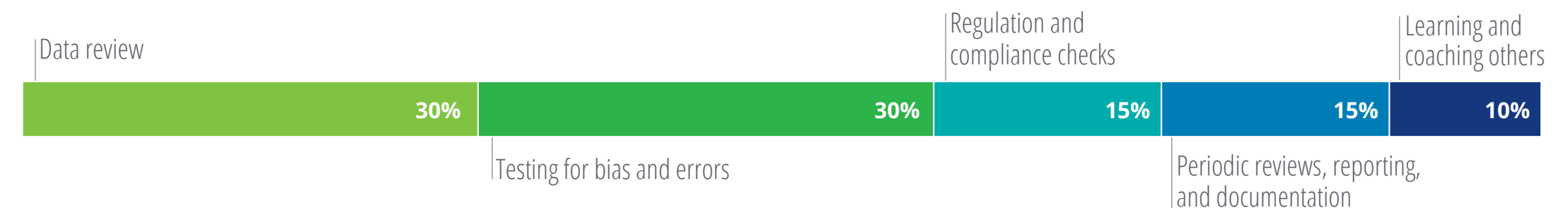
Algorithm auditors have knowledge of ethics and fairness, along with a practical understanding of how today's algorithms can impact citizens' daily lives. They work with data science teams and external vendors to review algorithms, ensuring they are transparent, fair, and explainable.

They also use various tools to identify which factors are associated with an artificial intelligence (AI) algorithm's results and whether the underlying data has an inherent bias. The auditor executes periodic reviews to determine fairness of a model after deployment. These reviews include checking for black-box issues, algorithmic bias, privacy protections, and unlawful discrimination. In addition to identifying problems, algorithm auditors also provide recommendations for how to make the model more ethical and explainable. They work with regulatory and judicial agencies to review the most advanced AI algorithms to take preventive and corrective measures *before* algorithms can impact citizens adversely.

Responsibilities

- Investigating potential algorithmic risk and bias to ensure ethical responsibilities are met

- Examining data sets used to train the models to determine if certain groups are underrepresented or overrepresented and reviewing for any privacy regulation violations

- Assessing the performance of algorithms on real data to test for hidden biases resulting from complex correlations

- Providing a trusted and objective third-party review, validating legal compliance of algorithms, and ensuring they are being used appropriately

- Certifying algorithms as "trusted" and escalate to remedial team when black-box issues are detected

Time spent on activities

Data review	Testing for bias and errors	Regulation and compliance checks	Periodic reviews, reporting, and documentation	Learning and coaching others
30%	30%	15%	15%	10%

WAYNE HOLT

ALGORITHM AUDITOR

Algorithmic Accountability Commission (Independent Regulatory Agency) | *Washington, D.C.*

Algorithm auditors play a key role in regulating how cognitive technologies make decisions and help protect citizens from potential adverse effects of technology. They review algorithms to ensure they protect privacy and are free from bias and discrimination.

Top skills

HUMAN

Critical thinking and logic

Regulation and ethics

Observation and investigation

Risk management and mitigation

Attention to detail

TECH

Data science

Analytics and modeling

Machine learning and AI

Business statistics

Programming languages

Experience

Algorithm auditor
Algorithmic Accountability Commission
2025–present

Presidential Innovation Fellow
Food and Drug Administration | Digital health precertification program
2024–2025

AI architect
Google
2021–2023

Machine learning engineer
Google
2019–2021

Education

Stanford University
Algorithm auditing
2023–2024

Massachusetts Institute of Technology
Bachelor of computer science
2016–2019

Other certifications

- **edX**
  Algorithm bias and risk

- **Nvidia**
  Deep learning

- **Stanford (Coursera)**
  Machine learning

- **Coursera**
  Neural networks

- **MIT**
  Professional judgment for algorithm auditing

TOOLBOX

THE TOOLBOX SUPPORTS THE WORKER AS A WHOLE—IN ACHIEVING EXTERNAL OUTCOMES SUCH AS PRODUCTIVITY AS WELL AS INTERNALLY FOCUSED ONES SUCH AS WELLNESS AND PERSONAL DEVELOPMENT.

Bias and risk

Datagen
This tool creates sample synthetic data with all of the possible variables that could possibly occur. It can also create custom sample data to analyze bias in algorithms.

A-suite
A cluster of tools that analyzes algorithms to detect potential problems in their decision-making processes. It pulls sample data to test for hidden biases resulting from complex correlations and other unexpected sources of error.

RegScan
A tool that scans databases of regulations, such as GDPR. It checks the algorithmic models' compliance with regulations and recommends if corrective actions are needed.

Reboot
Integrated with both A-suite and RegScan, Reboot is an experimental tool that provides suggestions and improvements to algorithms and training data sets. It also offers feedback regarding how an algorithm is being used.

Report generation

B keeper
A blockchain-enabled record-keeping tool that keeps track of all tests conducted on the algorithm, their results, and certification status.

Watchdog
This tool schedules periodic reviews of model fairness after deployment, including repeated data, white-box, black-box, and implementation reviews depending on initial results and use case type.

Learning and personal assistance

Bob
A voice-enabled virtual assistant that syncs across devices to help auditors stay productive on the go. Using a voice command, auditors can schedule appointments, retrieve case information, make notes, and perform other tasks.

Skills U
A personalized digital learning platform that offers self-paced learning on demand. The platform includes access to MOOCs, microdegrees, agency training, in-person workshops, and seminars.

Smart connect
This integrated workflow management and collaboration tool connects all individuals working on a particular case. They can assign tasks, review and edit work, have conference calls and meetings, and work seamlessly across teams and locations.

Data review

D check
This tool quickly scans through millions of training data and identifies potential privacy violations. D check is a one-stop platform that helps users understand the legal implications of using particular data.

Data doctor
This tool identifies overrepresentation or underrepresentation of certain groups in the training data, suggesting data sets that can be added from its library of public databases.

A DAY IN THE LIFE

0 8 : 0 0 AM

Over breakfast, Wayne reviews his tasks for the day and responds to a few emails with **Bob**'s help. He then heads to the nearby metro station to catch the train to work.

0 9 : 0 0 AM

At the office, Wayne generates test data using **Datagen** for an algorithm that profiles families and identifies factors that might predict and prevent child abuse or death. Working with a child welfare agency, the algorithm's developer is waiting for Wayne's team's approval at the Algorithmic Accountability Commission.

1 0 : 3 0 AM

Wayne uses **A-suite** to check test results. Even though **Data doctor** showed no bias on the training data, one of the recruitment algorithms used to hire application developers has been flagged for gender bias. The results are simultaneously updated on **B keeper**.

0 1 : 0 0 PM

Wayne hosts a lunch-and-learn for interns and junior staffers, many of whom join virtually via **Smart connect**. Wayne ordered lunch delivery from a nearby salad bar and he receives a pop-up notification on his smartwatch when the drone-delivered meal arrives.

0 3 : 0 0 PM

When **Watchdog** flags an algorithm used by law enforcement for review, Wayne collaborates with his colleague, Carol, a data scientist who previously worked at a law enforcement agency. **Data doctor** confirms overrepresentation of low income and minority communities. Wayne initiates a notice to the agency and requests enhanced data access so he can explore corrective measures on **Reboot**.

0 4 : 0 0 PM

Wayne performs a compliance check for an algorithm meant to monitor signs of radicalization and extremism. He tests the algorithm on **RegScan** to see if it complies with privacy regulations. **Bob** reminds him to take a break since he has been sitting for a long time. He decides to grab a coffee.

0 5 : 0 0 PM

Wayne's smartwatch beeps. He has a meeting with their AI vendor's development team and the commission's procurement lead to finalize new updates on some of their tools. He joins the meeting through **Smart connect**.

0 6 : 0 0 PM

Wayne wraps up his work for the day. On the train ride home, he listens to a podcast on **Skills U** on new developments and emerging applications in cognitive technologies.

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