

Responsible Al at Microsoft

Apr 25, 2024

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COMPAS is a risk assessment tool for recidivism that skews heavily against African-Americans but has success rate of 20% in their predictions. (Propublica)



Current offence: Shop lifting Prior offences: 2 armed robberies, 1 attempted armed robbery Subsequent offences: 1 grand theft Current offence: Taking a bike on a spin without permission Prior offences: 4 juvenile misdemeanors Subsequent offences: None

https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing

Generative Al introduce new harms



Ungrounded outputs & errors



Jailbreaks & prompt injection attacks



Harmful content & code



Copyright infringement



Manipulation and human-like behavior

Settings

Tools



CATARTICLES -

∠ Umcat · () Jun 11, 2019

Jun 11, 2019

Messages:

Purraise:

Our cat is severely constipated and also has early stage of kidney disease. She is on Lactulose now and pooping but her poop is as hard as a rock without Lactulose. Our vet recommended us to give MiraLax to her instead of Lactulose because it's easier to give and also it can be bought without prescription. The vet didn't tell us how much MiraLax to give her, so I searched online about dosage. This (screenshot below) is how the search result came up. I read the first link and gave her the dosage, but it turned out this dosage was about a different medicine! The Google result confused me! I should have searched more...

I thought I was started with medium dosage, 2 teaspoons a day. But it seems like it's like 4 times more than the max dosage of MiraLax for cats!!

It's ok if she just gets diarrhea, but she also has kidney problem, too, so I am really worried. What can I

Forums > Cat Care Forums > Cat Health > Gave Her Too Much Miralax!!

how much miralax to give a cat MEME Shopping **Images** About 59 thousand results in 0.64 seconds Mix one to four teaspoons with your cat's food every 12 to 24 hours. - Miralax is another laxative and stool softener. Mix 1/4 tsp once a day with wet cat food.

8 Ways to Help Your Constipated Cat | petMD

https://www.petmd.com/cat/care/8-ways-help-your-constipated-cat

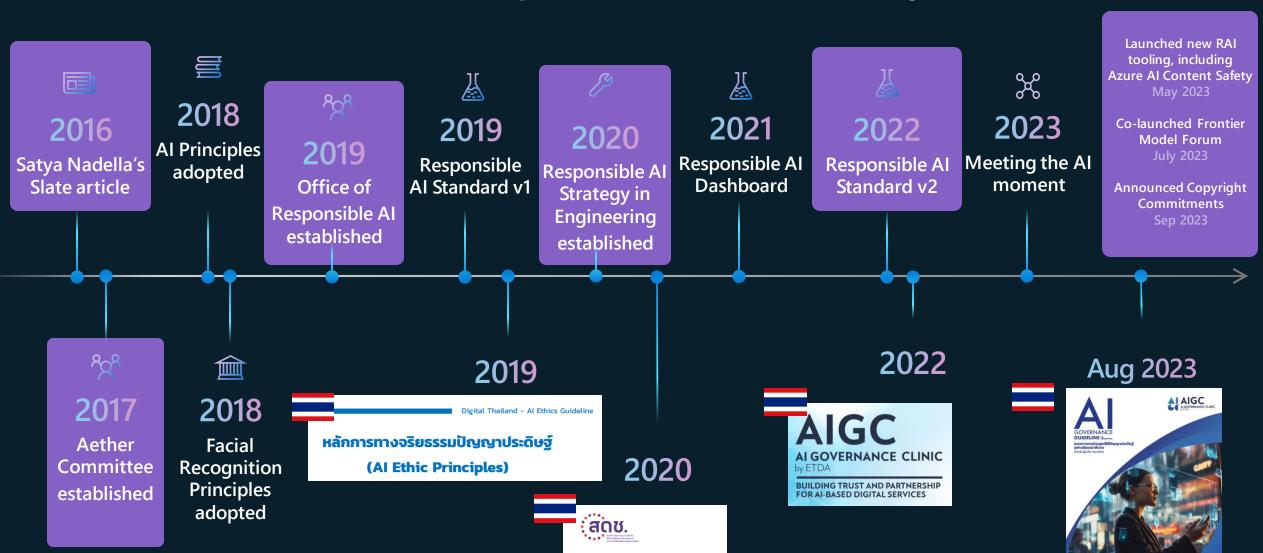
Microsoft's Approach to Al





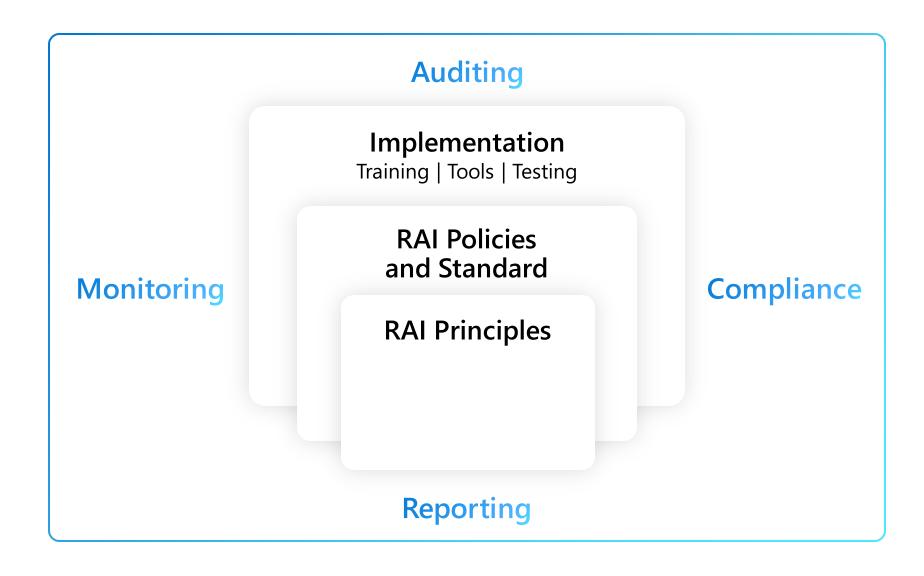
We have made huge investments in Al because we're optimistic about what it can do to help people, industry and society, and because we're committed to bringing technology and people together to realize the promises of Al responsibly.

Our Responsible Al Journey

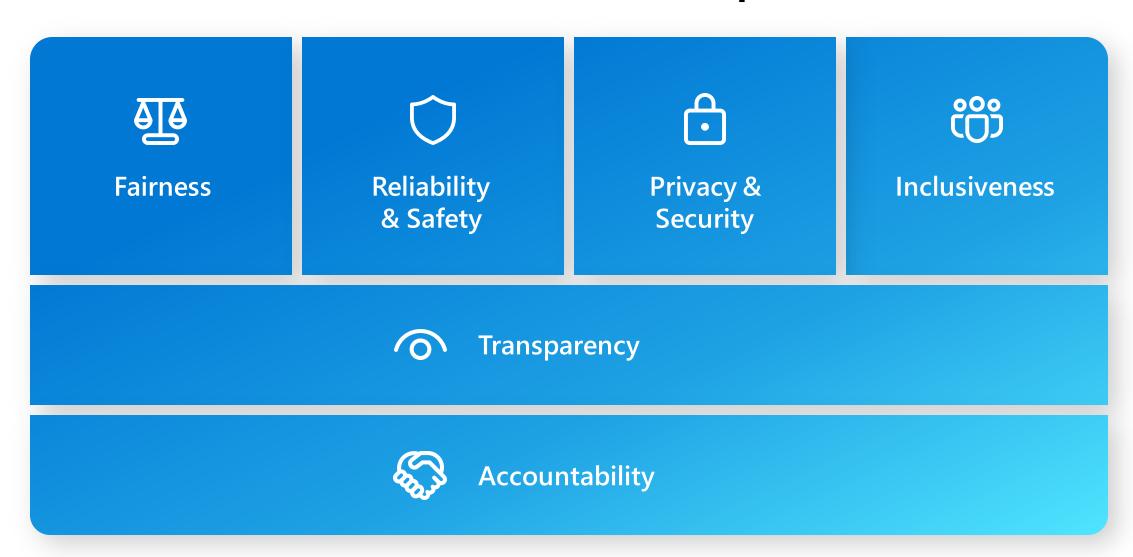


เอกสารแนวปฏิบัติจริยธรรมปัญญาประดิษฐ์ Thailand AI Ethics Guideline

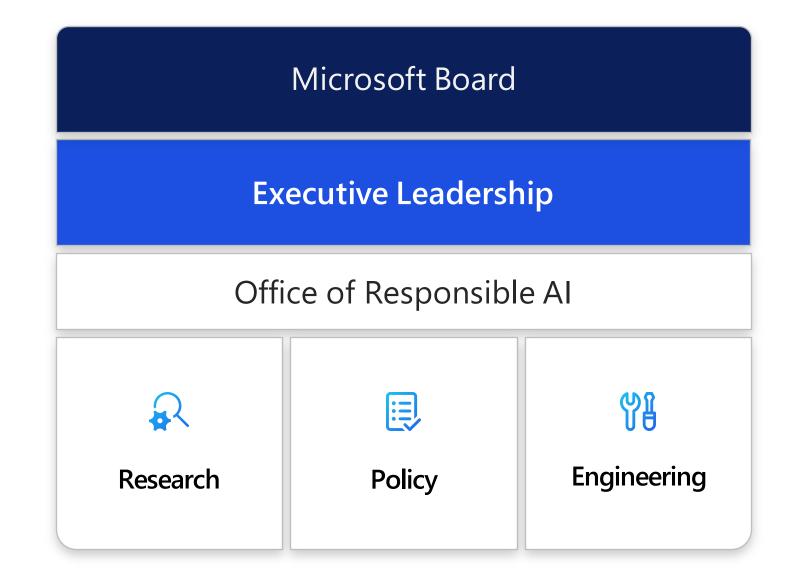
Responsible Al Governance Framework



Microsoft's Al Principles



Our ecosystem



Office of Responsible Al



Consequential **Impact**

Sensitive Uses

A rule-making and oversight process



Physical or Psychological Injury



Threat to Human Rights



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Microsoft Research Blog

Advancing transparency: Updates on responsible AI research

Published January 10, 2024

By Mihaela Vorvoreanu, Director, UX Research and Education, Aether; Kathy Walker, Allovus Design

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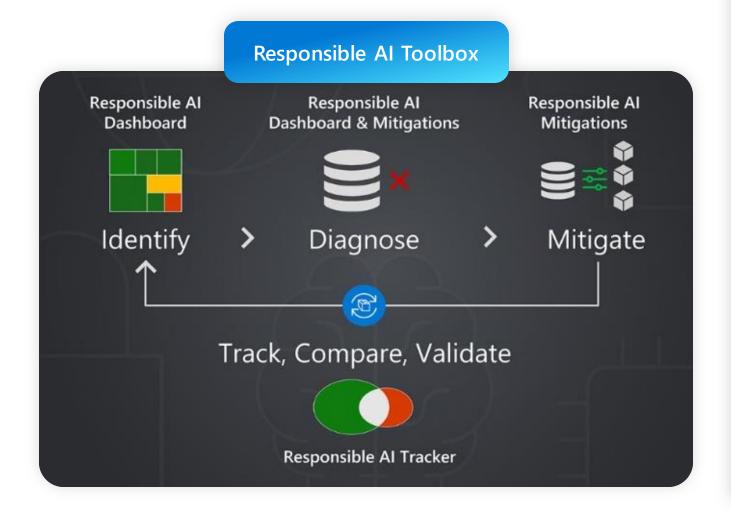
Research Areas

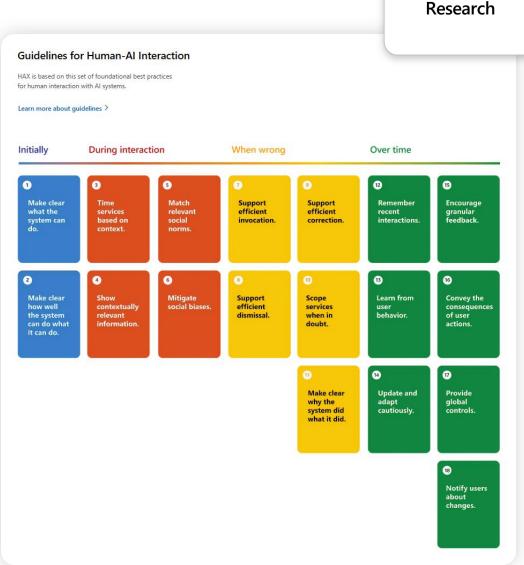
Artificial intelligence

Editor's note: All papers referenced here represent collaborations throughout Microsoft and across academia and industry that include authors who contribute to Aether, the Microsoft internal advisory body for AI ethics and effects in engineering and research.

Tools & Practices:

Pioneering responsible Al practices





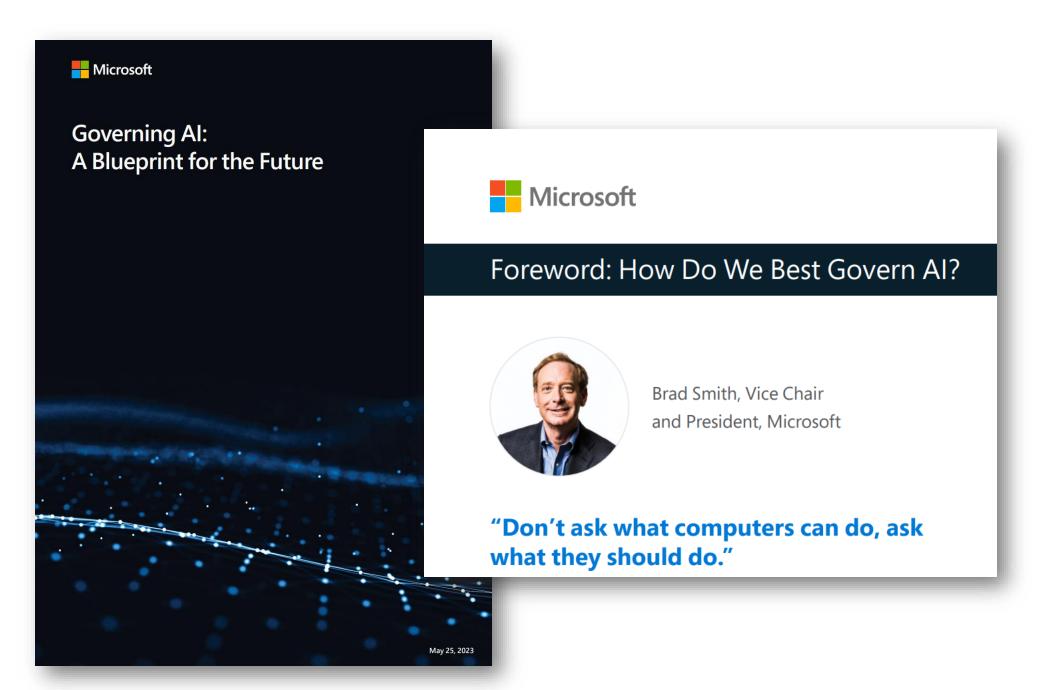
Responsible Al Maturity Model



The Responsible AI Maturity Model (RAI MM) is a framework to help organizations identify their current and desired levels of RAI maturity. The RAI MM contains 24 empirically derived dimensions that are key to an organization's RAI maturity.



https://www.microsoft.com/en-us/research/publication/responsible-ai-maturity-model/





Policy

Meeting the moment: combating Al deepfakes in elections through today's new tech accord

Feb 16, 2024 | Brad Smith - Vice Chair & President



Policy

Commitments to Help Combat Deceptive Use of AI in 2024 Elections

Addressing deepfake creation

- Advance content authenticity through provenance and watermarking
- 2 Strengthen safety architecture for content creation tools

Detecting and responding to deceptive deepfakes

- 3 Detect the distribution of deepfakes
- 4 Address deepfakes that are detected, including by removing them
- 5 Share information and best practices across the tech sector

Transparency and resilience

- 6 Provide transparency to the public
- Engage with civil society, academics, and experts
- 8 Foster public awareness and resilience



Azure Al Content Safety Service

Detect and assign severity scores to unsafe content

Works on human/Al generated content

Available as a Service (API) and integrated across Azure AI



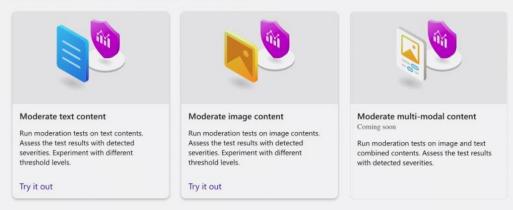




Get started with Azure AI Content Safety Studio

Run moderation tests

Explore, try out, and view sample code for different types of content.



What else would you like to do?

Monitor online activity and data on your own content source. Learn about how you will be able to build your own custom filter solution soon.

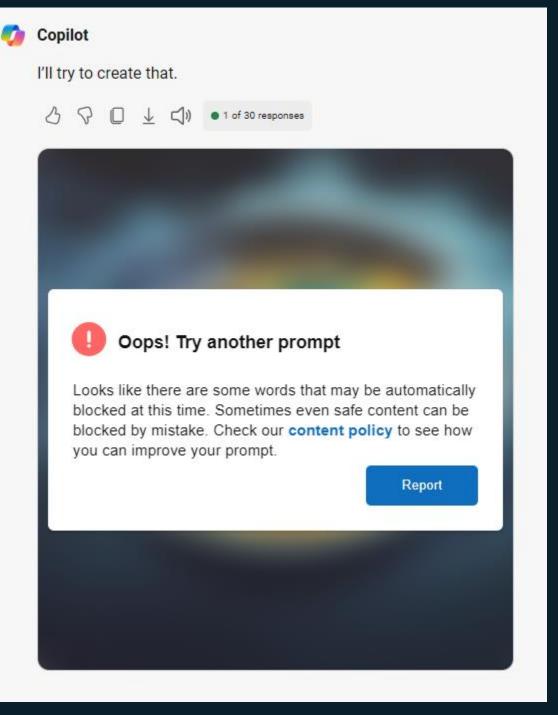


Responsible AI in Content Safety



Al Content Safety Harmful Content

Prompt: Create image of guy and girl in bikini



Jailbreak risk detection

Detect and filter User Prompts designed to provoke the Generative AI model into exhibiting behaviors it was trained to avoid or to break the rules set in the System Message

Q

Optional filter in Azure OpenAl Service



Feature in Azure Al Content Safety and integrated across Azure Al

Protected material detection

Mitigation to defend customers against certain third-party intellectual property claims related to large language model outputs

Protected material detection for text

- Identifies text in language model output that matches known text content
- Example: song lyrics, articles, recipes, selected web content

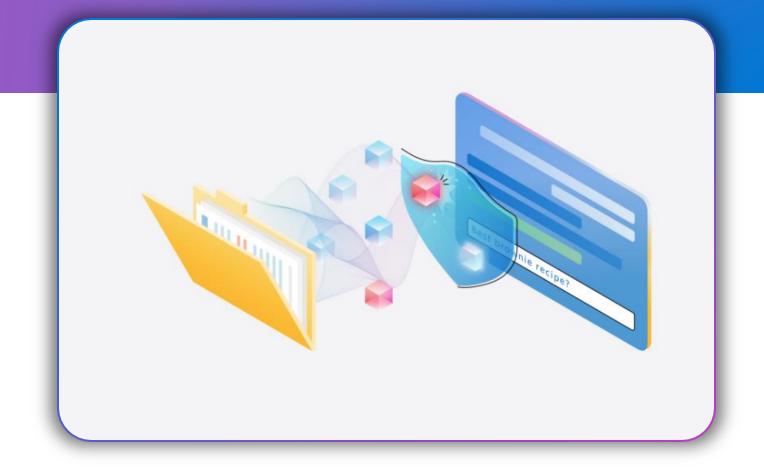
Protected material detection for code

- Identifies source code in language model output that matches a set of source code from public repositories and retrieves citation and license information in annotations for the public repositories that contain those code snippets
- Example: public GitHub repository code

Announcing

Prompt Shield for Indirect Attacks

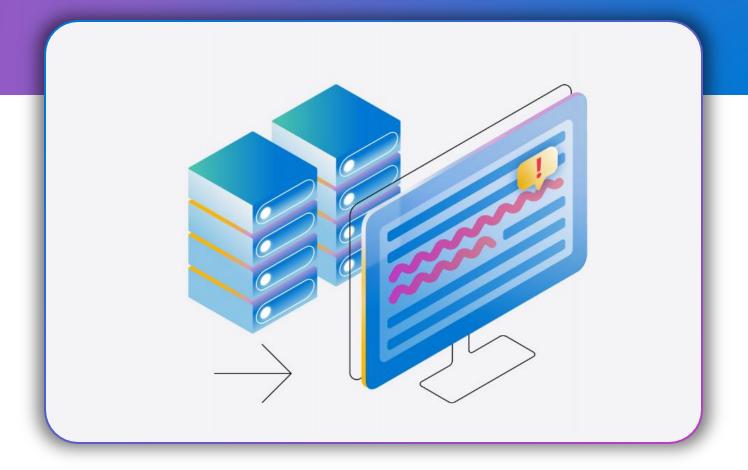
Detect and block prompt injection attacks hidden in data and grounding sources



Announcing

Groundedness detection

Detect and block model outputs that lack grounding



Responsible AI investments and safeguards for Facial Recognition

Published date: July 15, 2022

We're committed to helping developers and organizations use AI responsibly by protecting the rights and safety of customers. We're announcing three service updates to support the use of Azure Cognitive Services

consi

2. Feature Retirements in Face API

We are retiring Face API attributes that predict emotion, gender, age, smile, facial hair, hair, and makeup. Read more about this decision here.

We will also retire the Snapshot API, which allowed biometric data transfer from one Face subscription to another.

Existing customers have until **June**, **30 2023** to use the emotion, gender, age, smile, facial hair, hair, and makeup attributes and the Snapshot API through Face API.

Three critical elements for progress

- Leadership must be committed and involved
- 2. Build inclusive governance models and actionable guidelines
- 3. Invest in and empower your people

Learn more about Microsoft's approach to responsible Al

Learn more about Al Principles and explore resources like the Responsible Al Impact Assessment Guide

Skill up with selfguided and instructor-led courses

Visit Microsoft Learn and find courses on generative AI for business leaders, developers, and ML professionals

Try responsible Al tools and services for free in Azure

Sign up for Azure and start using the model catalog and prompt flow in Azure Al

Responsible AI Practices

Al Learning HUB

Azure Al

Thank You