

AI: PROMISE, POWER & PITFALLS

EXPLORING BENEFITS, CHALLENGES, AND FUTURE
IMPACT



DISCLAIMER:

Before I begin, a quick note: The views I'm about to share are based on my personal experiences, observations, and occasionally questionable life choices. They are entirely my own and not a formal declaration of universal truth of the internet.

If I reference situations, industries, or human behavior in general, please know my intention is to inform, reflect, and perhaps gently entertain — not to offend, criticize, or single anyone out. Any resemblance to actual persons, organizations, or your coworker is purely coincidental.

If something resonates with you, wonderful. If something doesn't, that's perfectly fine too — we can agree to disagree over coffee later.

Now that we're all legally and emotionally protected, let's begin.





SHORT SUMMARY OF THE VATICAN AI GUIDELINES

1. **Human Dignity:** AI must serve humanity, respecting the unique and irreplaceable dignity of every individual. This principle prohibits using AI to exploit, manipulate, or exclude, such as systems that perpetuate biases or degrade human autonomy.
2. **Transparency and Accountability:** The Vatican mandates that AI systems operate transparently and are subject to ethical oversight. For example, all AI-generated content must be clearly labeled, ensuring users can distinguish between human and machine contributions.
3. **Stewardship of Creation:** The guidelines, grounded in *Laudato Si'*, emphasize environmental stewardship. AI systems should not only avoid harm but actively contribute to caring for creation, prioritizing long-term ecological health over short-term profit.
4. **The Common Good:** AI must benefit all, particularly the marginalized, rather than serve the interests of a privileged few. The guidelines advocate for equal access to AI applications to ensure that technology does not deepen existing social inequalities.

<https://www.wordonfire.org/articles/lessons-from-the-vaticans-ai-guidelines/>

https://www.vatican.va/roman_curia/congregations/cfaith/documents/rc_dcf_doc_20250128_antiqua-et-nova_en.html

<https://www.catholic.com/magazine/online-edition/artificial-intelligence-and-the-faith>

A decorative graphic consisting of blue circuit-like lines with circular nodes, extending horizontally from the left and right sides of the central text box.

INTRODUCTION TO AI AND ITS IMPACT

AI Promise



AI increases productivity and expands human capability



Automation of repetitive work



Faster data analysis and decision support



Medical diagnostics and drug discovery



Personalized education and learning



Accessibility tools (translation, voice assistance)



Autonomous systems (vehicles, robotics)

AI Power



AI can augment or outperform humans in specific cognitive tasks.



Pattern recognition at massive scale



Natural language understanding and generation



Image, video, and voice synthesis



Predictive modeling and forecasting



Autonomous systems (vehicles, robotics)



Autonomous systems (vehicles, robotics)

AI Pitfalls

Without governance and ethical controls, AI can amplify harm



Deepfakes and misinformation



Bias in algorithms



Privacy concerns



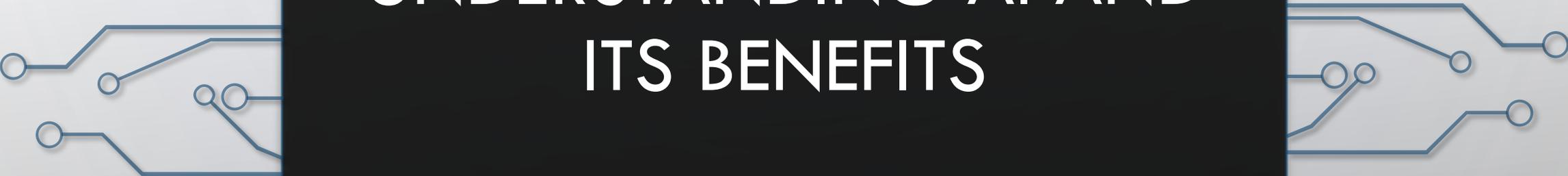
AI-assisted cybercrime



Predictive modeling and learning



Lack of transparency (“black box” systems)



UNDERSTANDING AI AND ITS BENEFITS



What is
Artificial Intelligence?



Why does
Artificial Intelligence matter?

AI TOOLS FOR SMARTER LIVING

| Tool Type | Example Use |
|---|---------------------------------|
|  Writing Assistants | Resume and email drafting |
|  Language Apps | Interactive language practice |
|  Summarization Tools | Condensing reports and articles |
|  Educational Platforms | Free courses and tutorials |

AI TOOLS FOR SMARTER LIVING

AI PRODUCTIVITY TOOLS for Personal Use



AI Assistants

- ChatGPT
- Claude
- Grok
- Claude
- Gemini
- Grok



AI Writing & Editing

- Grammarly
- Wordtune
- Copy.ai
- Jasper
- Copy.ai



Email Assistants

- Superhuman
- MailMaestro
- Flowrite
- Shortwave
- MailMaestro
- Clippit.ai



Scheduling & Calendar Automation

- Calendly
- Clockwise
- Motion
- Reclaim.AI
- Motion



AI Image Generation

- DALL-E
- MidJourney
- Adobe Firefly
- MidJourney
- Stable Diffusion
- Ideogram



AI Video Creation

- Runway
- Invideo
- HeyGen
- Pika
- Luma
- Synthesia



Spreadsheets & Notes

- Bricks
- Rows AI
- SheetAI
- Rows AI
- Formula Bot (Google Sheets AI add-in)



Spreadsheets & Notes

- Bricks
- Rows AI
- Notion AI
- Mem
- Perplexity
- Notion AI



Misc. Productivity Utilities

- Zapier Agents
- RescueTime AI Insights
- Calendar AI
- Scribe task recording



Misc. Productivity Utilities

- Zapier Agents
- RescueTime AI Insights
- Calendar.AI
- Scribe task recording

Examples of AI Usage



Healthcare AI

- Medical imaging diagnostics
- Predictive patient risk modeling
- AI-assisted surgery



Fraud Detection & Cybersecurity

- Real-time anomaly detection
- Behavioral analytics
- Automated threat response



Personalized Content Delivery

- Streaming recommendations
- Targeted marketing
- Adaptive learning platforms



Autonomous Systems

- Self-driving vehicles
- Smart traffic optimization



Customer Service Automation

- AI chatbots
- Voice assistants



Business Intelligence & Predictive Analytics

- Demand forecasting

A futuristic digital interface for AI in healthcare. A doctor in a white coat is seen from behind, looking at a desk with multiple monitors. The screens display various medical data, including a brain scan, a heart scan, and a 92% success rate. A robotic hand is visible in the upper right corner. The background is dark blue with glowing digital elements and a large 'AI' logo in a hexagonal frame at the top left.

AI

AI in Healthcare

Transforming medicine with AI-driven technology

Diagnostics

- ✓ AI-assisted medical imaging
- ✓ Early disease detection

- ✓ Patient risk prediction
- ✓ Outcome forecasting

Personalized Medicine

- ✓ Tailored treatment plans
- ✓ Drug discovery & development

Presentation & Slide Tools

- ✓ Beautiful, al, Gamma, Pitch,
- ✓ Tome, Decktopus, Slidesgo

Predictive Analytics

Administrative Automation

- ✓ Efficient medical record management
- ✓ Automated scheduling & billing

Analyze medical data, support clinical decisions, automate processes, and improve patient care.

Diagnostics & Imaging

Aidoc – AI-powered radiology imaging analysis

Zebra Medical Vision – Detects diseases from medical scans

Drug Discovery

Insilico Medicine – AI-driven drug discovery

Atomwise – Uses AI to identify potential drug compounds

BenevolentAI – Accelerates pharmaceutical research

Virtual Health Assistants

Ada Health – AI symptom checker

Babylon Health – AI-powered health consultations

Buoy Health – Digital symptom triage tool

Patient Monitoring

AliveCor – AI-powered ECG monitoring via smartphone

Biofourmis – Predictive analytics for remote patient monitoring

Current Health – AI-driven wearable monitoring platform

AI in Education



Examples:

Duolingo – Adaptive language learning

Coursera – AI-driven course recommendations

Grammarly – AI writing assistant

Quizlet – AI study tools and practice tests

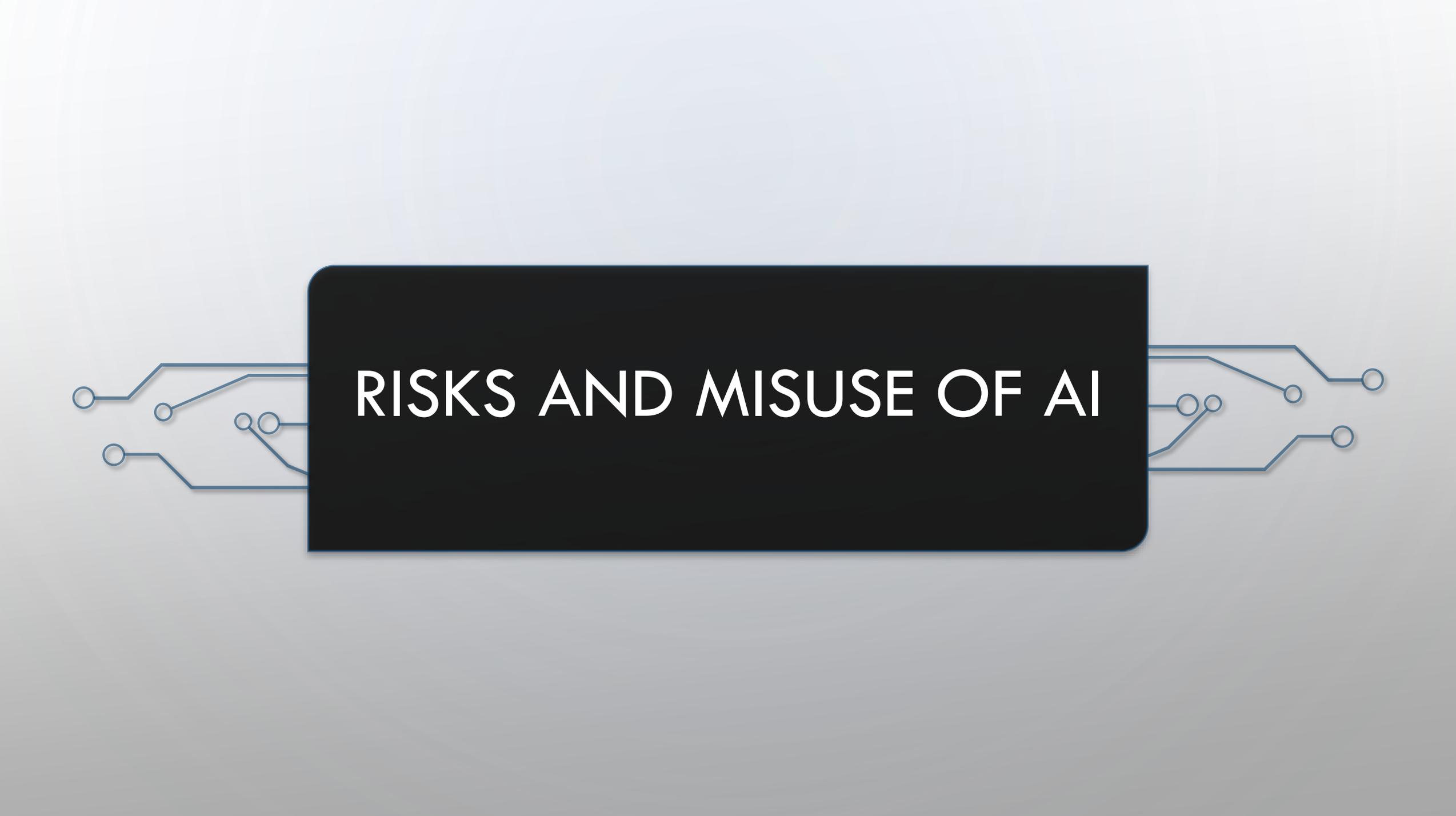
Socratic (Google) – AI homework help assistant

Carnegie Learning – AI math tutoring

DreamBox – Adaptive math learning

<https://teachbetter.ai/best-ai-platforms-for-teachers-in-2026/>

<https://ditchthattextbook.com/ai-tools/>



RISKS AND MISUSE OF AI

CRIMINAL EXPLOITATION OF AI



Cybersecurity Threats

| | | |
|---|----------------------------|--|
|  | Phishing | Exploiting human trust to gain unauthorized access to accounts and sensitive data. |
|  | Deepfake Videos | Reputational harm, misinformation |
|  | Deepfake Audio | Financial scams, extortion |
|  | Fake Profiles | Social engineering attacks Non-consensual explicit media |
|  | Malware and Hacking | AI-crafted malware, adaptive code |
|  | Misinformation Bots | Public opinion manipulation |

Rising Cybercrime Incidents

Cybercrime incidents related to 48,900 fraud-related (fraud, identity fraud and identity theft) cybercrime violations reported by police in 2023, almost double (+95%) the number reported in 2019.

Business Cybersecurity Challenges

In 2023, 1 in 6 Canadian businesses faced cyber incidents, with recovery costs doubling to \$1.2 billion.

Prevalence of Phishing Attacks

Phishing targeted 43% of Canadians, remaining a prevalent and critical cybersecurity threat.

<https://www.statcan.gc.ca/o1/en/plus/8764-computer-security-day-every-day>

<https://reportcyberandfraud.canada.ca/>

<https://www.cyber.gc.ca/en/guidance/national-cyber-threat-assessment-2025-2026>





RED FLAGS FOR PHISHING 2026



Urgent or Threatening Language

Immediate action required, threats of account suspension etc.



Unexpected Attachments

PDF, Word document or ZIP attachment you didn't expect



QR Code to Scan (Quishing)

Uses QR codes to bypass traditional link scrutiny



Unfamiliar Senders

Emails from unknown or spoofed domains



Fake Voicemails or Faxes

e.g., "New Voicemail Received" with attachment/link



Suspicious Links

Hovering shows unusual or misspelled URLs



Abnormal Sender Address

Slight typos that mimic real domains (e.g., @amazon.com)



Fake Customer Login Pages

Webpages imitating known sites' login pages to capture credentials.



Request for Sensitive Info

Asks for passwords, personal details, or payment info

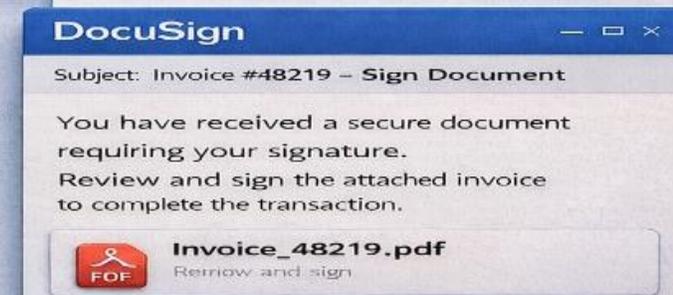
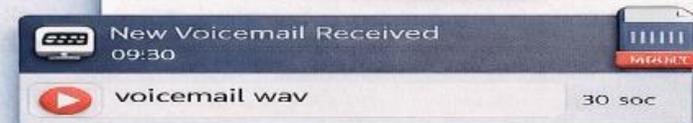


Unprofessional Spelling / Grammar

Poor grammar, misspellings, or unusual wording



PHISHING METHODS CONSTANTLY EVOLVE. ALWAYS VERIFY REQUESTS BEFORE CLICKING LINKS OR SCANNING QR CODES.



CYBERSECURITY EXPERT



How to Spot a Deepfake Video

Look for Inconsistent Details



Blurry or unnatural features, mismatched lighting, strange shadows

Listen for Audio Issues



Voice that is robotic, out of sync, or with background noise.

Check for Compression Artifacts



Pixellation and visual glitches

Watch Facial Movements

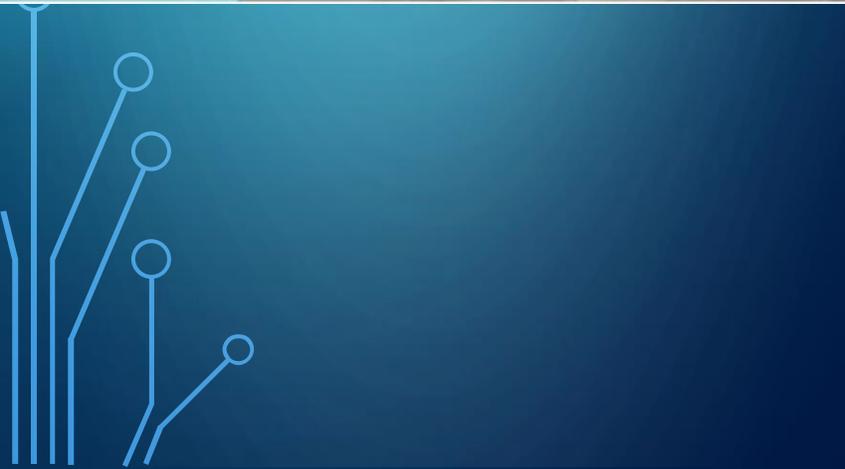
Unnatural expressions, shifting or lagging features



Original



Deepfake



<https://www.frontiersin.org/journals/sociology/articles/10.3389/fsoc.2022.907199/full>

<https://sosafe-awareness.com/blog/how-to-spot-a-deepfake/>

<https://viggle.ai/tools/image-to-video-ai>



How to Spot Deepfake Audio

Inconsistent Audio Details

Strange pauses, clipped words, unnatural intonation

Listen for Synthetic Quality

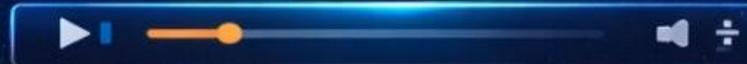
Voice sounds robotic, emotionless, or lacks natural rhythm

Analyze Background Noise

Abnormal background hums or strange mismatched noises

Compare Voiceprint Patterns

Differences in pitch, cadence, or voiceprint analysis





How to Spot Fake Online Profiles

Check the Profile Photo

Reverse image search for stolen or altered pictures



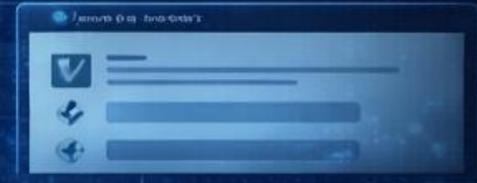
Look at Bizarre Behavior

Aggressive, overly generic or too-good-to-be-true messages



Check Profile Details

Vague bio, low activity, and missing or suspicious info.



Review Friends & Activity

Lack of genuine connections, suspicious patterns.



Malware and Hacking



**MALWARE
DETECTED**



**HACK IN
PROGRESS**



**SECURITY
BREACH**



ACCESS GRANTED



**PASSWORD
CRACKED**



**SECURITY
BREACH**

THE RANSOMWARE CORPORATION



AI-Assisted Misinformation Bots



FAKE NEWS!

MISINFORMATION

NETNVS!

FALSE INFO

FAKE NEWS!

Click Bait!

#LACK INFO





**STAYING INFORMED AND
PROTECTED**

Protecting The Safety of Youth, Adults, and Seniors

Safeguarding All Ages Against AI Misuse and Cybercrime



Youth

Social Media Safety

- Generate Manipulation
- Guard Personal Data
- Limit AI Device Use

Limit AI Device Use



Adults

Enable AI-Driven Security

- Practice Safe Online Behavior
- Educate About Deepfakes
- Secure Accounts & Devices

Monitor Kids' Online Activity



Seniors

Learn Scam Signs

- Use Strong, Unique Passwords
- Be Skeptical of Unsolicited Calls
- Backup & Protect Important Data

Seek Help if Unsure



General Security Reminders:



Beware of Deepfake Scams



Strong, Unique Passwords



Think Before Clicking Suspicious Links



Stay Updated on Cyber Threats

Impact: Fake News • Social Manipulation • Political & Financial Harm

SAFETY TIPS
FOR
EVERYONE



CONCLUSION AND FUTURE



The future is Human + AI

We are and will always be:



Individuality, love, touch and comfort



High emotional intelligence



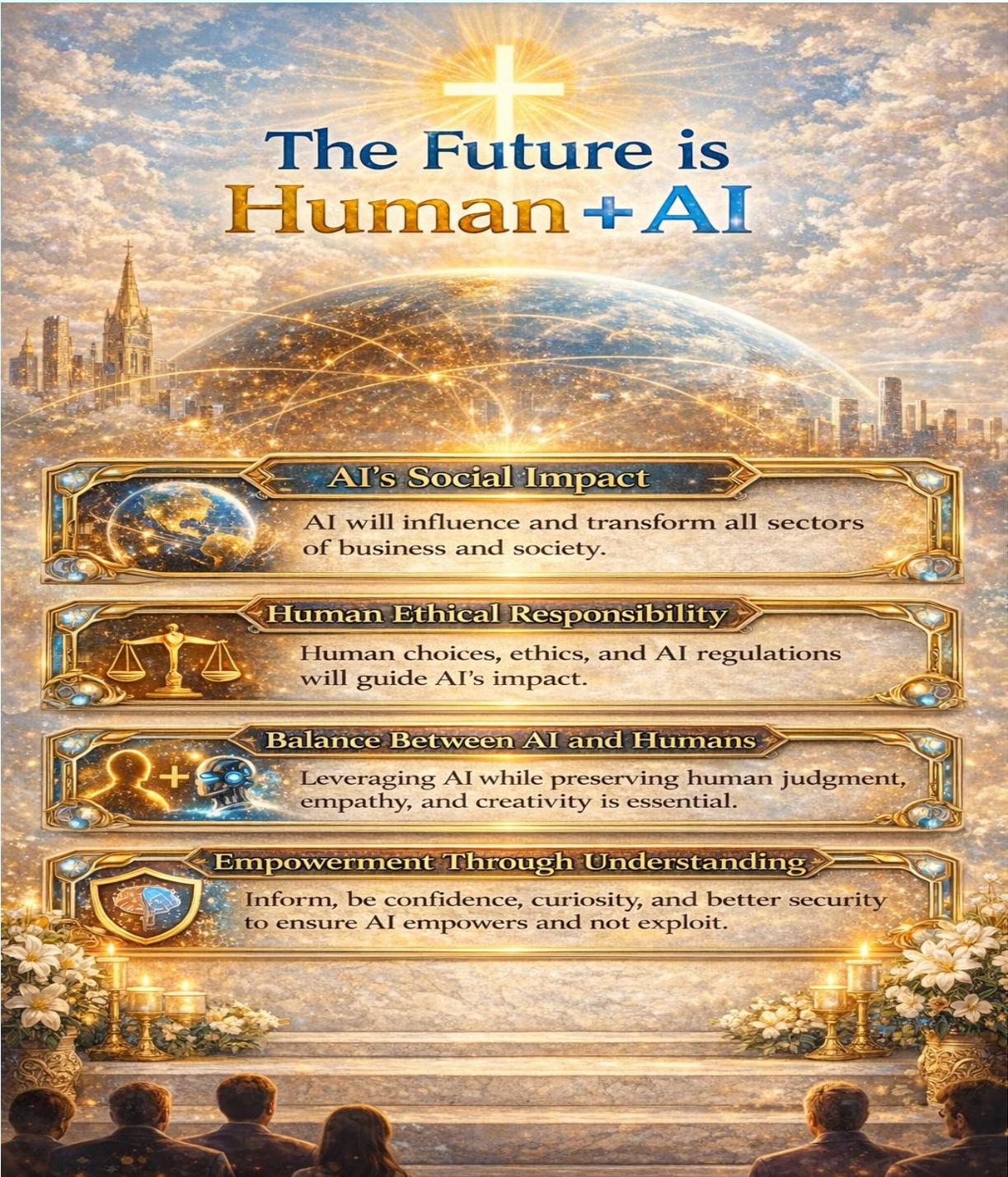
Complex ethical judgment



Genuine creativity



Exceptional agility
in trying / chaotic situations



The Future is Human + AI

AI's Social Impact

AI will influence and transform all sectors of business and society.

Human Ethical Responsibility

Human choices, ethics, and AI regulations will guide AI's impact.

Balance Between AI and Humans

Leveraging AI while preserving human judgment, empathy, and creativity is essential.

Empowerment Through Understanding

Inform, be confident, curious, and better security to ensure AI empowers and not exploit.

