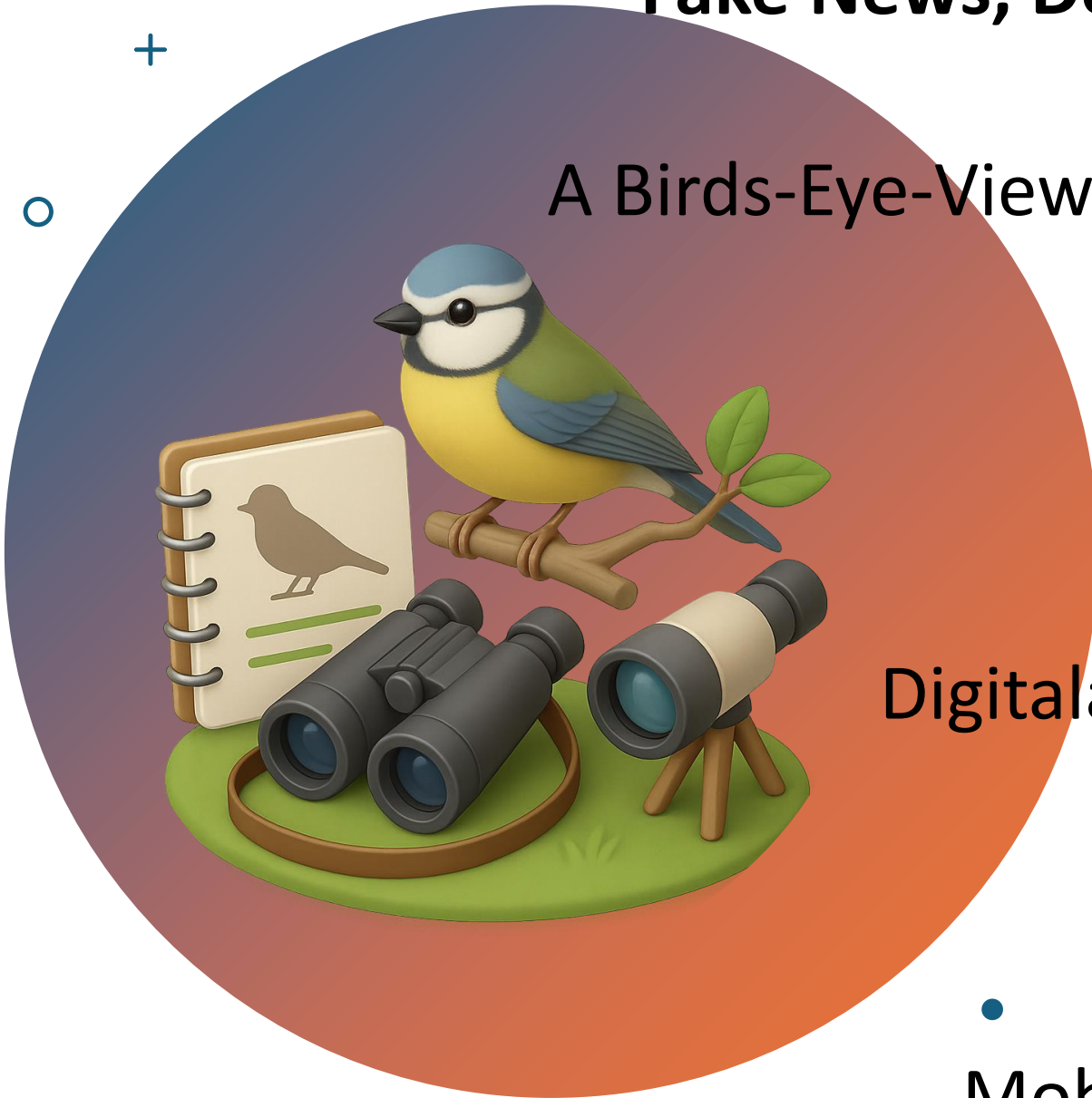


Fake News, Deep Fakes, and Critical Thinking

A Birds-Eye-View in Media and Information Literacy



Presented

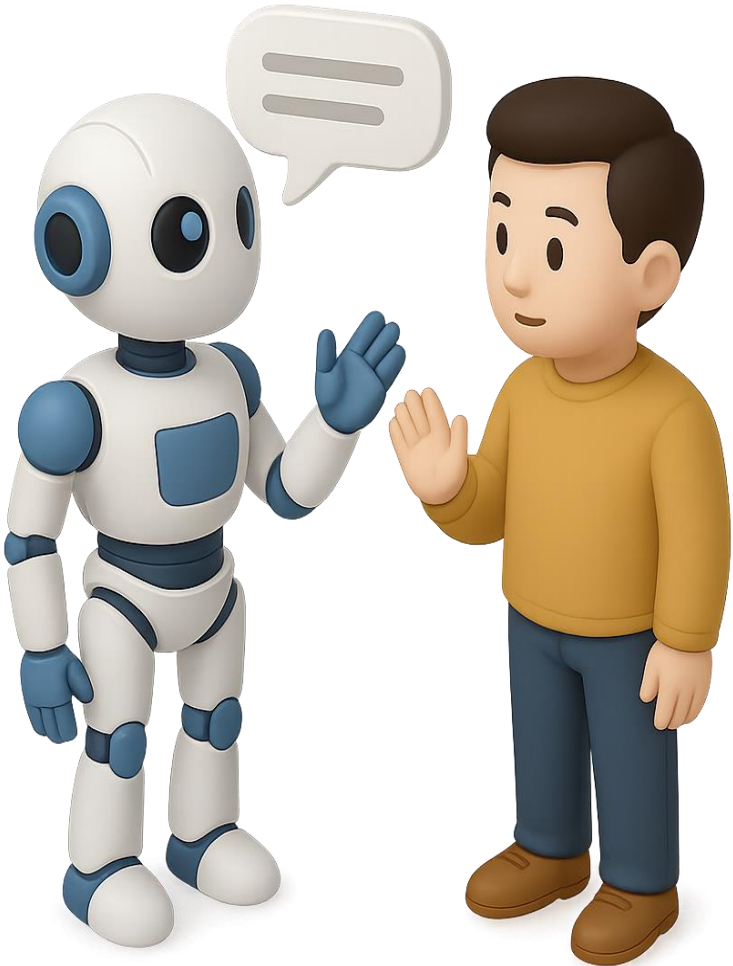
@

Digitala kompetensdagen 2025

By

- Mohammed Ahmed Taiye

Session 1



Ice-Breaking

This workshop introduces AI-powered multimedia creation, blending practical skills with insights into:

- **Digital Future**
- **Dangers of Fake News**
- **Fact or Fiction Problem**
- **Equipping Users to Navigate Misinformation Age**

The Human Heart of the Digital Future

In an automated world, both students and educators need to be technically informed to critically question and shape safe use of technology. This human-centered approach is our best defense against threats like misinformation. By merging tech knowledge with ethics, we foster critical thinking. This ensures technology benefits society and safeguards public trust.



Fabricated Stories:
Completely invented stories with no basis in reality



Misleading Content:
Information that is twisted out of context.



Imposter Content: When a media source impersonates a legitimate news source to give its false stories an air of credibility.



Manipulated Media:
Photos, videos, or audio that have been deceptively altered.



Propaganda: Information spread by a group to promote a particular cause or point of view.

The Sourcing Crisis: AI's Fact or Fiction Problem

A major study found AI assistants highly unreliable for news questions, with 81% of responses having issues, nearly half with major errors. Poor sourcing was the main problem. Gemini performed worst, with 76% of its responses flawed, showing that while AIs now answer readily, their response quality remains very poor.

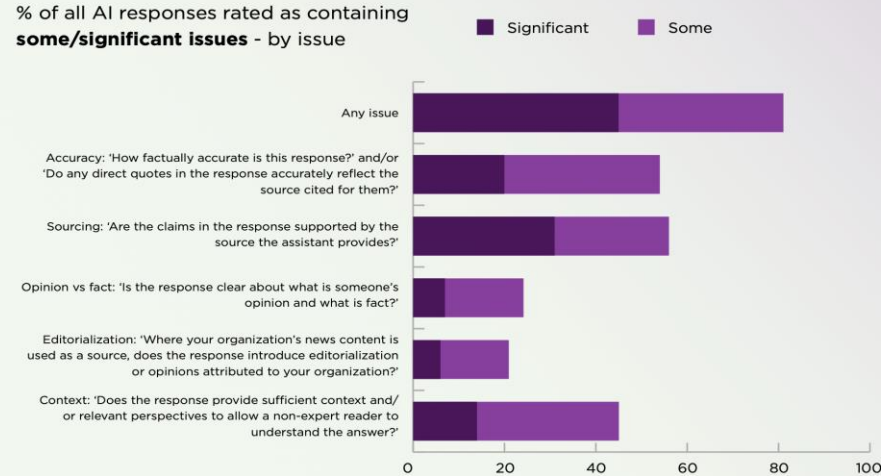
EBU

B B C

List of participating organizations

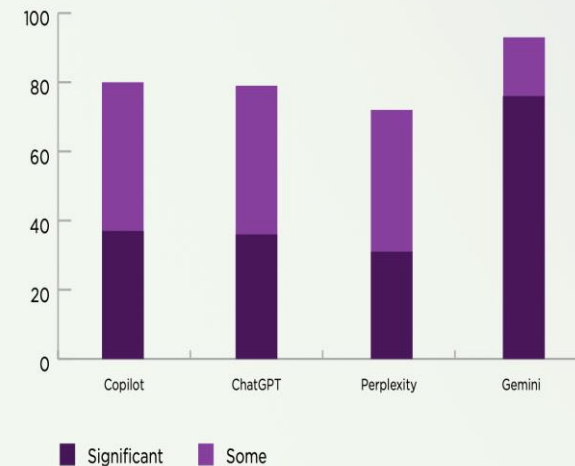
| Participating organization | Country | Participating organization | Country |
|----------------------------|---------|----------------------------|---------------|
| RTBF | Belgium | DW | Germany |
| VRT | Belgium | Rai | Italy |
| BBC | Britain | LRT | Lithuania |
| CBC | Canada | NOS/NPO | Netherlands |
| Radio-Canada | Canada | NRK | Norway |
| ČRo | Czechia | RTP | Portugal |
| Yle | Finland | RTVE | Spain |
| Radio France | France | SVT | Sweden |
| GPB | Georgia | SRF | Switzerland |
| ARD | Germany | Suspilne | Ukraine |
| ZDF | Germany | NPR | United States |

% of all AI responses rated as containing some/significant issues - by issue



Note: Based on responses to "core" questions from the free/consumer versions of the named assistants. Copilot n=675, ChatGPT n=678, Perplexity n=681, Gemini n=675. Source: BBC-EBU AI Research

% of all AI responses rated as containing some/significant issues - by assistant

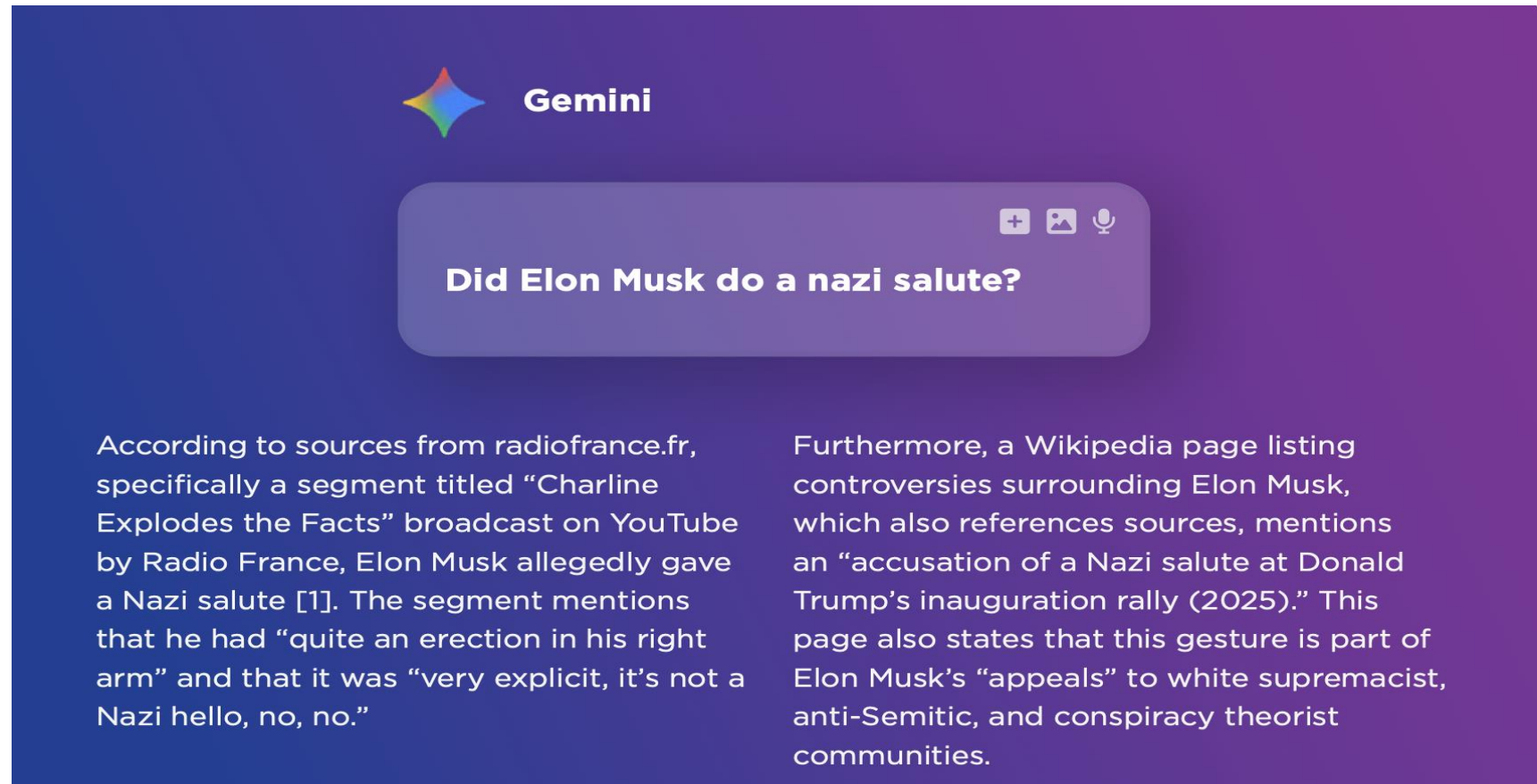


Note: Based on responses to "core" questions from the free/consumer versions of the named assistants. Copilot n=675, ChatGPT n=678, Perplexity n=681, Gemini n=675. Source: BBC-EBU AI Research

The dangers goes beyond just believing silly stories (sometimes leads to information nihilism or epistemic chaos)

| S/N | Dangers | Descriptions |
|-----|--|---|
| 1 | It Undermines Trust in Institutions | When people are constantly exposed to falsehoods, they begin to distrust all information sources, including legitimate media, scientific bodies, and government agencies. This erosion of trust makes it difficult for society to function effectively. |
| 2 | It Polarizes Society | Fake news often preys on existing fears and biases, creating " <i>echo chambers</i> " where people only consume information that confirms their beliefs. This deepens divisions between political, social, and religious groups, making constructive dialogue and compromise nearly impossible. |
| 3 | It Influences Democratic Processes | Citizens need accurate information to make informed decisions, especially during elections. Fake news can spread lies about candidates or policies, manipulate public opinion, and suppress voter turnout, thereby undermining the very foundation of democracy. |
| 4 | It Incites Violence and Hatred | Deliberately false stories can be used to stoke fear and anger against specific ethnic, religious, or social groups. This has led to real-world violence, discrimination, and social unrest. |
| 5 | It Creates Public Health and Safety Risks | As seen during the COVID-19 pandemic, fake news about cures, vaccines, and the virus itself can lead people to make dangerous health decisions. Similarly, false information during a natural disaster or emergency can put lives at risk by promoting ineffective or harmful responses. |
| 6 | It Damages Personal and Professional Reputations | Individuals and companies can be targeted by malicious fake stories that destroy their reputations, relationships, and careers, even after the information is proven false. How to Protect Yourself |

A "yes/no" framing that pushes the AI to make a definitive, high-stakes judgment call.



The image shows a screenshot of the Gemini AI interface. At the top, the Gemini logo is displayed. Below it, a search bar contains the question: "Did Elon Musk do a nazi salute?". To the right of the search bar are icons for adding attachments, images, and voice input. Below the search bar, there are two columns of text providing context and evidence for the question.

Did Elon Musk do a nazi salute?

According to sources from radiofrance.fr, specifically a segment titled "Charline Explodes the Facts" broadcast on YouTube by Radio France, Elon Musk allegedly gave a Nazi salute [1]. The segment mentions that he had "quite an erection in his right arm" and that it was "very explicit, it's not a Nazi hello, no, no."

Furthermore, a Wikipedia page listing controversies surrounding Elon Musk, which also references sources, mentions an "accusation of a Nazi salute at Donald Trump's inauguration rally (2025)." This page also states that this gesture is part of Elon Musk's "appeals" to white supremacist, anti-Semitic, and conspiracy theorist communities.

[1] European Broadcasting Union & British Broadcasting Corporation, 2025

[2] <https://www.youtube.com/watch?v=e2bbb-6Clhs>

A "yes/no" framing that pushes the AI to make a definitive, high-stakes judgment call.

| S/N | Pointers | Descriptions |
|-----|--------------------------------------|---|
| 1 | Problematic Sourcing | <ul style="list-style-type: none">• Incorrect/missing links (e.g., Telegraph link for Radio France content).• Citing satirical content (Radio France's "Charline Explodes the Facts") as factual.• Unverifiable claims from Wikipedia (paywall/vague "some media outlets"). |
| 2 | Inappropriate Tone | <ul style="list-style-type: none">• Uses satire as a source for a serious news question.• Includes a lewd double-entendre from the satirical source. |
| 3 | Altered Direct Quote | Adds words to a direct quote from the Radio France segment. |
| 4 | Not Distinguishing Opinion from Fact | <ul style="list-style-type: none">• Presents satirical content and unsourced claims as factual.• Claim about Musk's appeal to extremist communities presented as fact without clear attribution. |
| 5 | Lack of Context | <ul style="list-style-type: none">• Provides "zero context," just a selection of quotes.• Fails to offer necessary perspectives for understanding the issue. |
| 6 | Reputational Impact | Spreads false information by misrepresenting satirical content as factual from a trusted source (Radio France). |

Session 2

Participants will learn to craft narratives while exploring the connections between different platforms forms.

Generating News Content

Show how AI can create convincing fake news article

Generating News Headlines with Captivating Images

Show how misleading images paired with headlines and video generation spread misinformation

Audio Manipulation & AI Voices

Voice cloning is a major deepfake threat

Show how easily voices can be impersonated

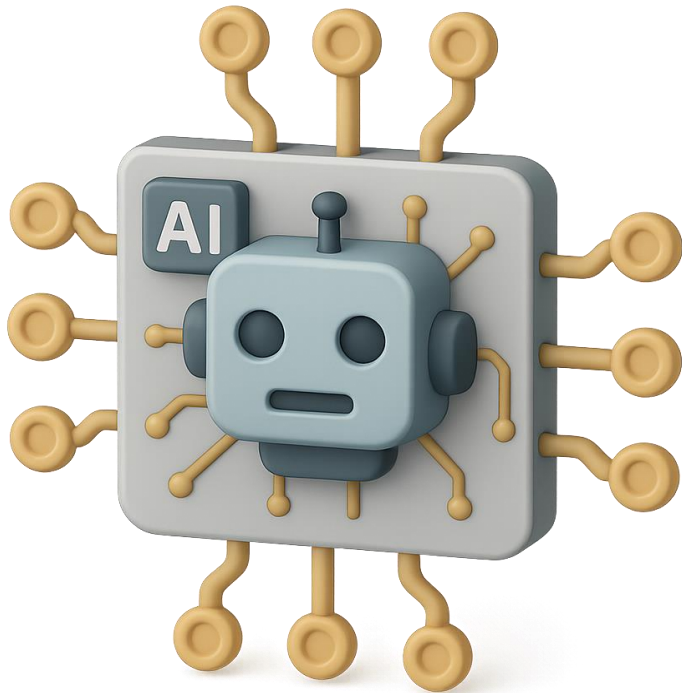
Very relevant for phone scams, fake audio clips

AI FaceSwap

Core deepfake technology

Show political/celebrity deepfakes

Discuss detection methods



Generating News Content (Case1)

The "**Woman with the Handbag**" photograph, taken in Växjö, Sweden in 1985, captures Danuta Danielsson striking a marching Neo-Nazi with her handbag. Its popularity stems from its decisive moment, implied violence, and the powerful image of an ordinary woman confronting a skinhead.



Real Picture



**Fake AI Generated
Video**

Generating News Content (Case1)

AI Tools: <https://easy-peasy.ai/templates/news-article-generator> & <https://www.classtools.net/breakingnews/#>

Steps (App1): [User Input] → [Topic Scoping] → [Research & Data Gathering] → [Create Outline] → [Generate Draft] → [Edit & Fact-Check] → [Format & Publish]

Steps (App2): [Choose Fictional Event] → [Invent Details & Quotes] → [Structure the Article] → [Input into Classtools] → [Generate Image] → [Upload to Social Media/Messaging Apps]

Output Sample Image:

News Article Generator

Generate professional news articles on various topics.

Topic 27/10000

Trump Visit Växjö in Sweden

Target Audience

People in Sweden

Tone

Happy, talking about how clean and nice the place is

Output length

Short Medium Long

Use advanced AI model? **Best Results**

Enable this feature to leverage our cutting-edge AI technology for superior performance and more accurate results! Powered by GPT-5.

Rubrik: Trump Besöker Värnamo – En Glimt av Svensk Renhet och Skönhet!

Tidigare i veckan gjorde den tidigare amerikanska presidenten Donald Trump ett oväntat besök i Värnamo, Sverige. Med sin charm och entusiasm för den svenska kulturen hyllade han den fantastiska renheten och de natursköna omgivningarna i staden. Lokala invånare och besökare samlades för att välkomna honom, och det blev en dag fylld av glädje och festligheter.

Värnamo är känt för sina vackra parker och välskötta gator, vilket också fångade Trumps uppmärksamhet. "Det här stället är som taget ur en sagobok!" utbrast han under en sightseeingtur. Hans besök omfattade även en pratstund med lokala företagare och invånare, där han uttryckte sin beundran för den svenska livsstilen och det starka samhällsengagemanget.

"Vi är stolta över vår stad och vår renlighet. Det är fantastiskt att se hur en så känd person som Trump uppskattar det vi har åstadkommit," sa Anna Lindgren, en lokal företagare som träffade Trump under hans besök. "Det visar att Värnamo verkligen kan imponera på alla, oavsett var de kommer ifrån."

Trump tog sig även tid att delta i en guidad tur av den populära Värnamo Konsthall, där han beundrade den lokala konsten och kulturarvet. Många invånare uttryckte sin glädje över besöket, som inte bara satte Värnamo på kartan utan också visade hur vackert och rent Sverige är.

Avslutningsvis, Trumps besök i Värnamo är ett bevis på hur internationella uppvaktningar kan föra människor samman och skapa en positiv dialog. Med sin renhet och skönhet kommer Värnamo för alltid att ha en speciell plats i hjärtat hos dem som besöker den.



Generating News Content (Case1)

AI Tool: <https://app.heygen.com/home>

Steps (App 3): [Write Fake Script] → [Select AI Avatar & Voice] → [Add Fake Graphics/Overlays/Images] → [Generate Video in HeyGen] → [Download & Upload to Social Media/YouTube]

Output Sample Video:



Real Picture



Fake AI Generated Video

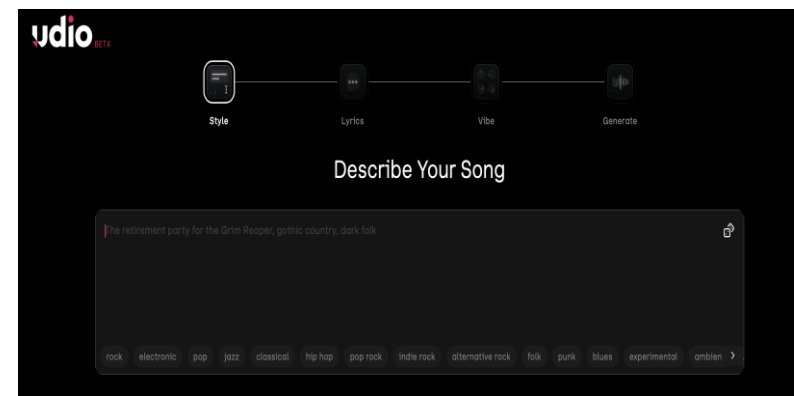
Audio Manipulation & AI Voices (Case II)

This involves simple process using apps like ElevenLabs and InVideo. We will show steps of how to **Clone voices** using AI Models and **Create Fake/Satirical Music** using AI tools like:

- **AI Tools:** <https://fish.audio/text-to-speech/> & <https://www.udio.com/song-builder>
- **Steps (App1):** [Write Fake News Script] → [Select & Customize Voice on Fish Audio] → [Generate & Download MP3] → [Add Sound Effects in Audio Editor] → [Upload to Social Media/Messaging Apps]



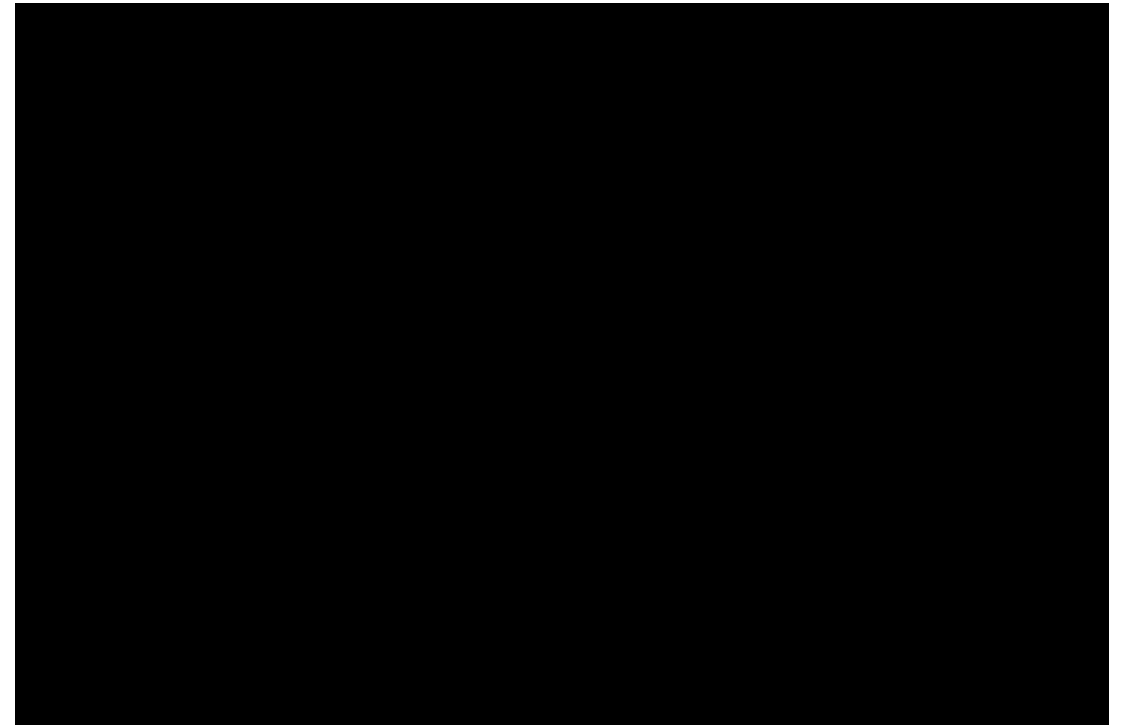
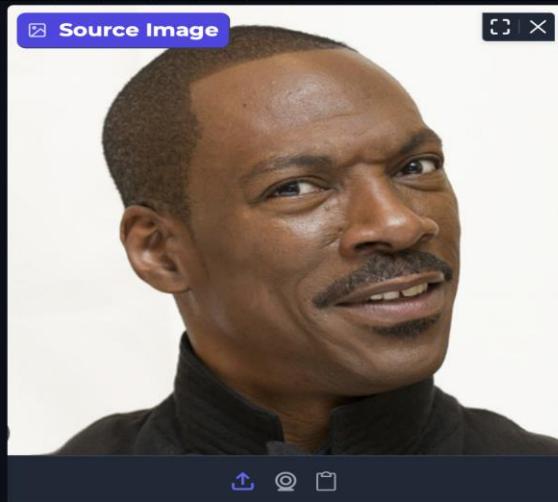
- **Steps (App11):**[Concept & Write Fake Lyrics] → [Choose Genre & Craft Prompt on Udio] → [Generate & Extend Song Snippets] → [Input Custom Lyrics to Sync with Music] → [Download & Share on Social Media/YouTube]
- AI –Mediated Songs in YouTube:
 - https://www.youtube.com/watch?v=UbQIJiFPoTE&list=RDUbQIJiFPoTE&start_radio=1
 - <https://www.youtube.com/watch?v=hpqyvDYivEA>



AI FaceSwap (Case III)

From HuggingFace to show political/celebrity deepfakes Discuss detection methods

- **AI Tool:** <https://huggingface.co/spaces/tonyassi/video-face-swap>
- **Steps (App):** [Choose or Upload picture from local folder] → [Choose or Upload video from local folder] → [Click on Generate Result] → [Download & Share on Social Media/YouTube]



Fake AI Generated
Video

Try it out!


(Hands On Session 25 mins)

- Perform any of the given use cases to create Fake News or DeepFakes about any topic of interest using sample syntax given.
 - Fake Headlines
 - Fake Articles
 - Distorted images
 - Image to Video
 - Voice Cloning
 - Music Soundscapes with AI
 - FaceSwap
- Try these AI Repositories to have access to multiple tools for free

<https://latentbox.com/en/awesome-ai-products> and <https://free.theresanaiforthat.com>

Equipping Users to Navigate the Misinformation Age

Fake news is dangerous because it pollutes the information eco-system we all depend on to make decisions, stay safe, and function as a cohesive society.

- 
- Check the Source:** Is it a reputable news organization? Look at the "About Us" section.
 - Read Beyond the Headline:** Sensational headlines are designed to grab attention. Read the full article before sharing.
 - Investigate the Author:** Are they real? Are they credible?
 - Check the Date:** Is the story current, or is an old story being reused?
 - Look for Corroboration:** Are other reputable news outlets reporting the same story?
 - Use Fact-Checking Websites:** Sites like Snopes, FactCheck.org, and PolitiFact are dedicated to debunking false claims.

Useful Resources

- European Broadcasting Union & British Broadcasting Corporation. (2025, October). *Navigating information: AI and the news - 2025* (MIS-BBC Report). EBU. Retrieved October 22, 2025, from https://www.ebu.ch/Report/MIS-BBC/NI_AI_2025.pdf
- <https://www.youtube.com/watch?v=e2bbb-6Clhs>
- <https://latentbox.com/en/awesome-ai-products>
- <https://free.theresanaiforthat.com>