

Al Standards Exchange

Challenging the status quo of AI security

11 July 2025 Geneva, Switzerland









The Rising Threat of Hyper-Realistic Generative Al

11 July 2025 Geneva, Switzerland

"Fake content is becoming indistinguishable from reality"

- Current capabilities:
 - New models (Veo3, DALL·E 3) generate 8s videos with perfect lip-sync
 - 98% of people can't spot Al faces in recent MIT tests
- Emerging risks:
 - Political deepfakes swaying elections (e.g. Biden voice clone robocalls)
 - \$2.5B lost to Al-powered financial scams in 2023









Al as the Detective – Current Detection Methods

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"Fighting fire with fire: AI detecting AI"

Technical approaches:

- Spatial forensics: Pixel-level artifact detection (Microsoft Authenticator)
- Temporal analysis: Unnatural blinking/gesture patterns (Meta's system)
- Multimodal verification: Audio-visual sync checks (Intel FakeCatcher)

• Limitations:

- Requires constant model retraining (new forgery techniques emerge weekly)
- Fails with high-quality synthetic content (e.g. Sora-generated videos)









The inevitable Future — Perfect Digital Forgery

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"When seeing is no longer believing"

- Projected timeline:
 - 2025: >50% of social media videos potentially synthetic (Gartner)
 - 2027: Al passes "Turing Test" for video authenticity
- Fundamental challenge:
 - Both generation and detection use same neural architectures
 - Eventually reaches equilibrium where fakes are perfect copies









A Systemic Defense Framework

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"No silver bullet – layered defense required"

Technical layer:

- Mandatory watermarking (e.g. C2PA standard)
- Real-time detection APIs for platforms

Regulatory layer:

- China-style deepfake labeling laws
- Platform liability for unchecked synthetic content

Social layer:

- Media literacy programs (teaching "digital skepticism")
- Verified content channels (like BBC's verified reporter system)





