



| Deep Dive into Deep Fakes

Cybersecurity Session for SFS AM

SFS Cybersecurity

Cybersecurity headlines of the last few weeks

- **Deepfake** of principal's voice is the latest case of AI being used for harm

2024-04-29 ([source](#))

- **US SEC's** X account hacked to announce fake Bitcoin ETF approval

2024-01-09 ([source](#))

- **Microsoft** Says Russian Gov Hackers Stole Source Code After Spying on Exec Emails

2024-03-08 ([source](#))

- **Hewlett Packard Enterprise** tells SEC it was breached by Russian hackers

2024-01-24 ([source](#))

- Energy giant **Schneider Electric** hit by ransomware attack

2024-01-29 ([source](#))

- **Mercedes-Benz** source code exposed

2024-01-30 ([source](#))

- China-backed hackers have lurked inside **US critical infrastructure** for 'at least five years'

2024-02-07 ([source](#))

- Steel giant **ThyssenKrupp** confirms cyberattack on automotive division

2024-02-26 ([source](#))

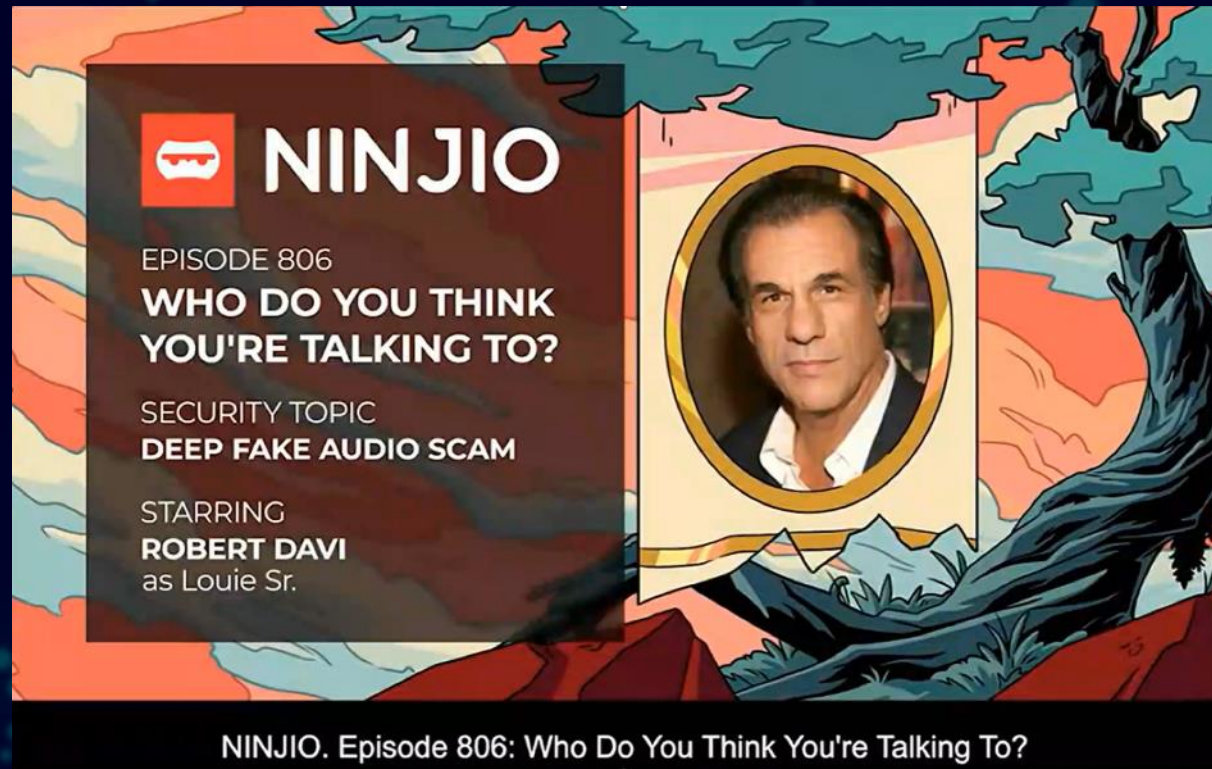
- Police arrest **LockBit ransomware** members

2024-02-20 ([source](#))

- **LockBit ransomware** returns, restores servers after police disruption

2024-02-25 ([source](#))

„Who do you think is calling?“



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[My Learning
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(5 min)
“Deep Fake
Audio Scams”

[My Learning
World video](#)
All videos of
the “NINJIO”
series

Deepfake video – HK\$ 200 million scam

Hong Kong / Law and Crime

‘Everyone looked real’: multinational firm’s Hong Kong office loses HK\$200 million after scammers stage deepfake video meeting

- Employee fooled after seeing digitally recreated versions of company’s chief financial officer and others in video call
- Deepfake technology has been in the spotlight after fake explicit images of pop superstar Taylor Swift spread on social media sites

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Harvey Kong

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Why you can trust SCMP



[‘Everyone looked real’: multinational firm’s Hong Kong office loses HK\\$200 million after scammers stage deepfake video meeting | South China Morning Post \(scmp.com\)](#)

THE BIG FRAUD —

Deepfake scammer walks off with \$25 million in first-of-its-kind AI heist

Hong Kong firm reportedly tricked by simulation of multiple people in video chat.

BENJ EDWARDS - 2/5/2024, 4:54 PM



[Deepfake scammer walks off with \\$25 million in first-of-its-kind AI heist | Ars Technica](#)

- Hong Kong branch of a multinational company lost 24m € to scammers.
- Scammers posed as the firm’s CFO in a video conference call and ordered money transfers.
- Attackers turned publicly available video of staff members into convincing versions of the meeting’s participants - everyone except the victim were deepfakes of real people.
- Employee had received phishing messages in the weeks before (“CFO: secret transaction required”) but dismissed them as fake.
- Employee followed a fake meeting invite where he dismissed his doubts – other participants looked and sounded like colleagues.
- Employee then did as instructed and made 15 transfers to five Hong Kong bank accounts.

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Deepfake powered Fraud

- **Deepfakes:** AI and machine learning based generation of realistic images/videos/audio of real people.
- Related fraud cases are currently rare but must not be underestimated.
- With exponentially advancing technology, fakes become more sophisticated and believable, making them a more and more attractive tool for cyber criminals and fraudsters.
- Approval processes based on voice/video calls need to be reviewed and adjusted.



Examples of what generative AI technology can do

[30 second demo](#) of real-time AI powered image manipulation (face filter)

Apple Research: A short video sequence of a person is enough to [create a convincing avatar](#)

- Top Deep Fake Detection tools
- [Sentinel](#)
 - [Intel Real-time deepfake detector](#)
 - [WeVerify](#)
 - [MS Video Authenticator tool](#)

Deepfake Incidents in the News

- Sudan disinformation** (10/2023)
Voice deepfake of former leader Omar al-Bashir on TikTok caused confusion in war-torn Sudan.
- Canadian president scam** (09/2023)
Deepfake of Prime Minister Trudeau enticed a man from Ontario to invest \$11000 USD in crypto.
- Family emergency scam** (03/2023)
A couple paid \$21000 USD after receiving an AI-assisted call, pretending to be their son.
- Fake Kyiv Mayor Espionage** (10/2022)
Mayor of Berlin received a real-time video call showing an AI-generated Kyiv mayor Vitali Klitschko.
- Crypto Exchange fraud** (08/2022)
AI-generated video of Binance executive fooled companies they would be listed on the crypto-currency exchange.
- Zelensky disinformation** (03/2022)
Deepfake video of Ukrainian president Zelensky on Facebook, ordering troops to surrender.
- UAE financial institution scam** (10/2021)
Fake voice call of a company's director convinced a branch manager to wire \$35 million USD.
- Russian opposition deepfake** (04/2021)
Deepfake video calls pretending to be Russian opposition leaders approached European MPs.
- CEO voice scam** (08/2019)
Criminals used AI to fake the voice of a UK company's CEO, asking to transfer €220000.

| Contact

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[2024 Cybersecurity Conference](#) – May 14-16, 2024

