Deepfake Scammers

written by Mert SARICA | 3 June 2024

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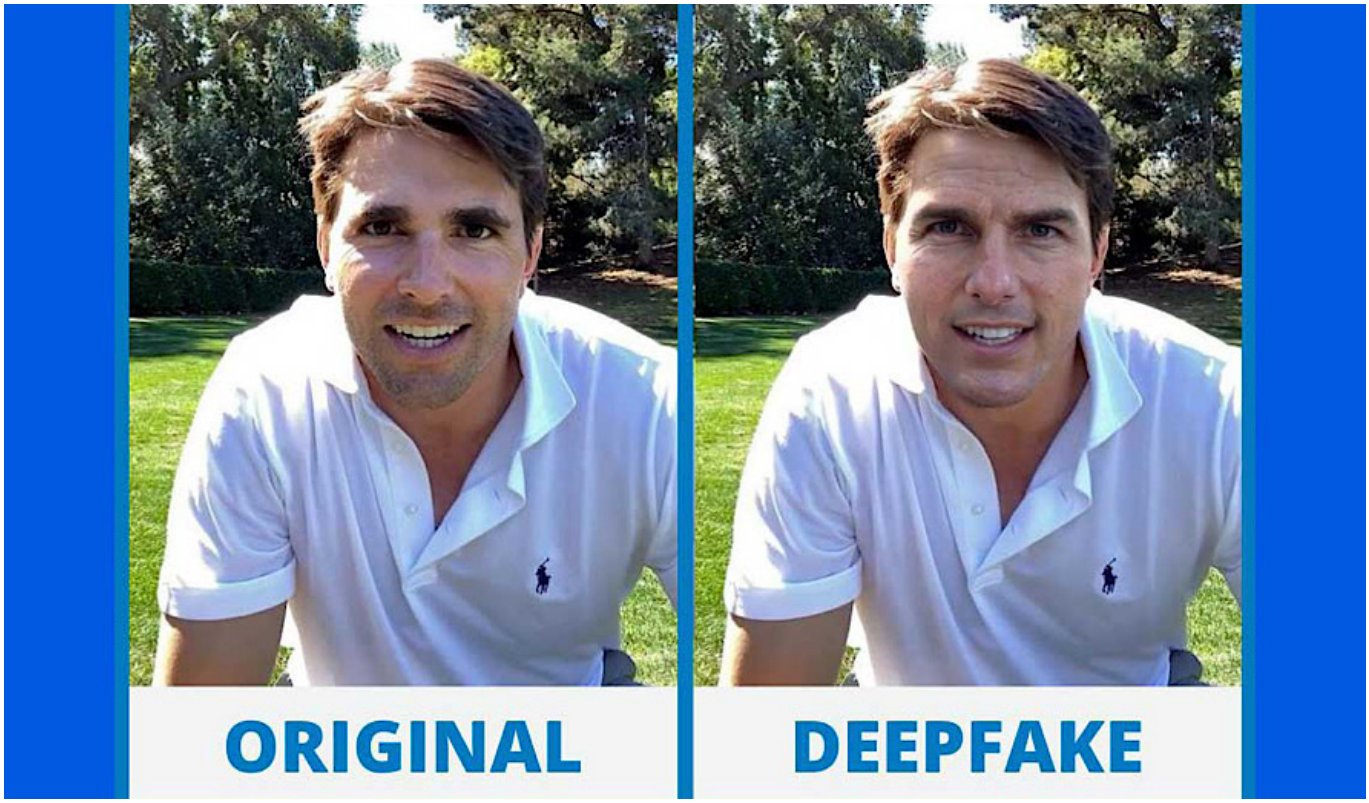
Introduction

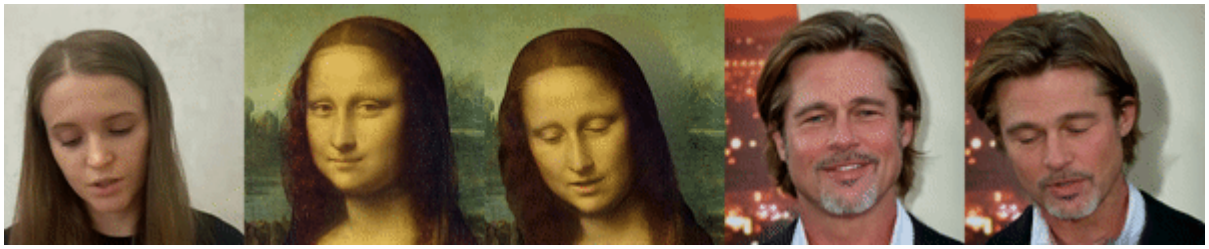
As of May 2024, we continue to witness the revolution and development of generative artificial intelligence with both excitement and concern. OpenAI showcased to the world in a launch event that with their newly announced GPT-4o, ChatGPT can engage in dialogue much more closely resembling human interaction, understanding and producing content from voice, text, and images. On the other hand, not wanting to fall behind in the AI wars, Google shared a new feature from its own generative AI, Gemini, shortly after OpenAI. With this feature, Gemini could instantly convey to the user what was happening in the surroundings and the current location through the camera application.

Well, if you ask what worries cybersecurity professionals and researchers the most alongside these developments that we follow with great excitement and curiosity, in my opinion, it can be how much these features facilitate or hinder fraud attempts and cyber attacks by scammers and threat actors. Just as with humanoid robots, the development in generative artificial intelligence is often compared to human or near-human productivity, which means that malicious individuals also benefit greatly, especially in creating visual, video, audio, and text deepfakes. OpenAI CEO Sam ALTMAN seems to share my concerns, as he recently announced that they are working on a tool to detect deepfake images created with OpenAI’s DALL-E 3 model.

What is Deepfake?

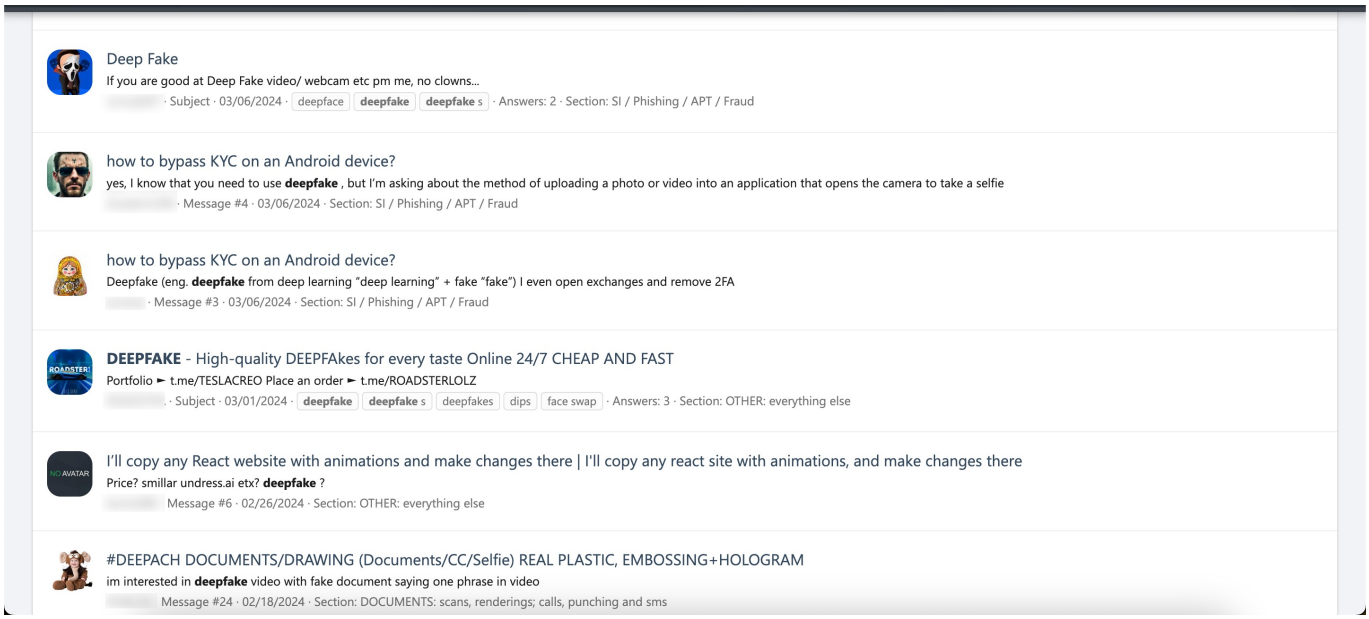
Deepfakes are synthetic media that have been digitally manipulated to replace one person’s likeness convincingly with that of another. Coined in 2017 by a Reddit user, the term has been expanded to include other digital creations such as realistic images of human subjects that do not exist in real life. While the act of creating fake content is not new, deepfakes leverage tools and techniques from machine learning and artificial intelligence, including facial recognition algorithms and artificial neural networks such as variational autoencoders (VAEs) and generative adversarial networks (GANs). In turn the field of image forensics develops techniques to detect manipulated images. (Source: Wikipedia)

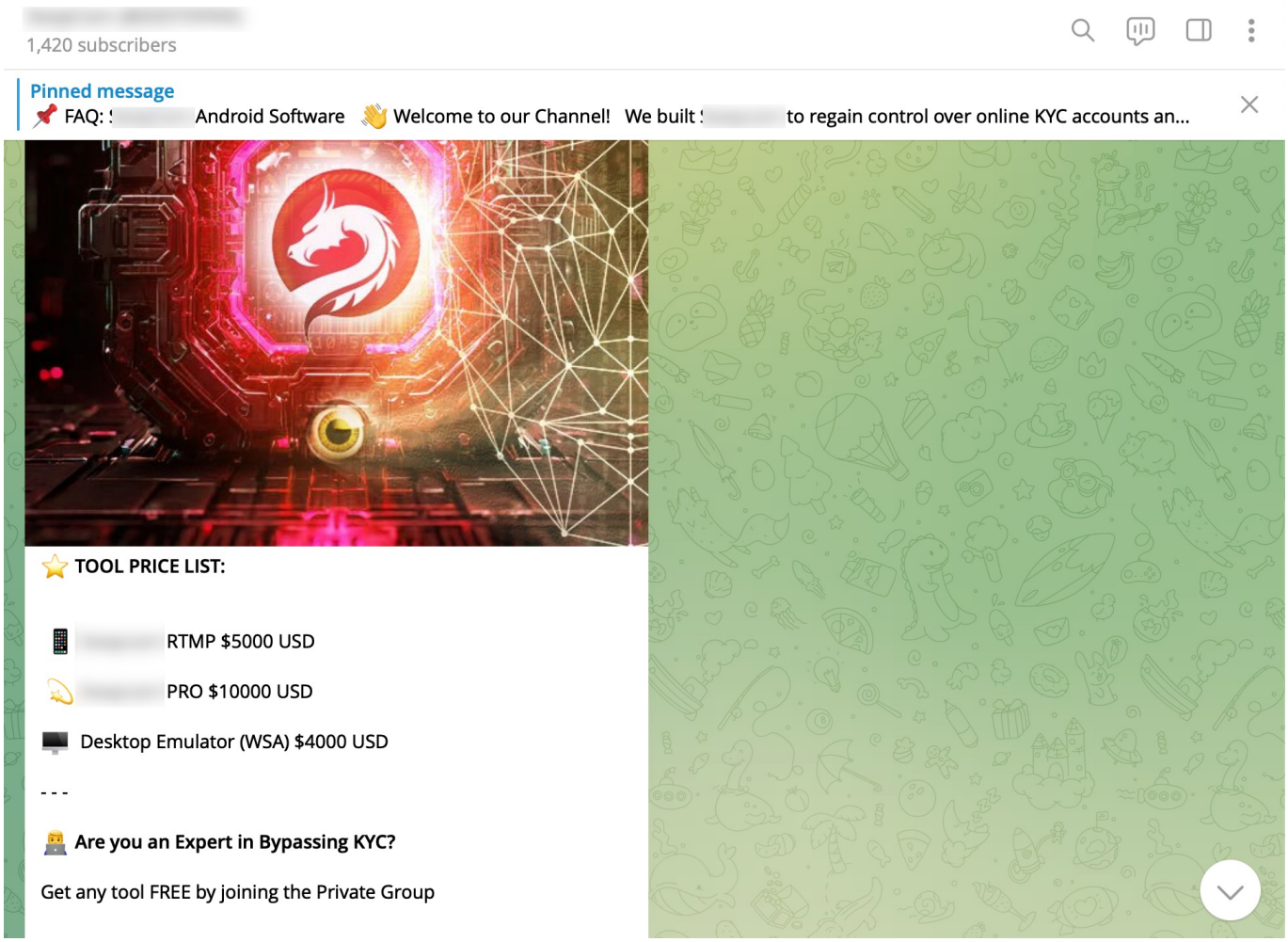


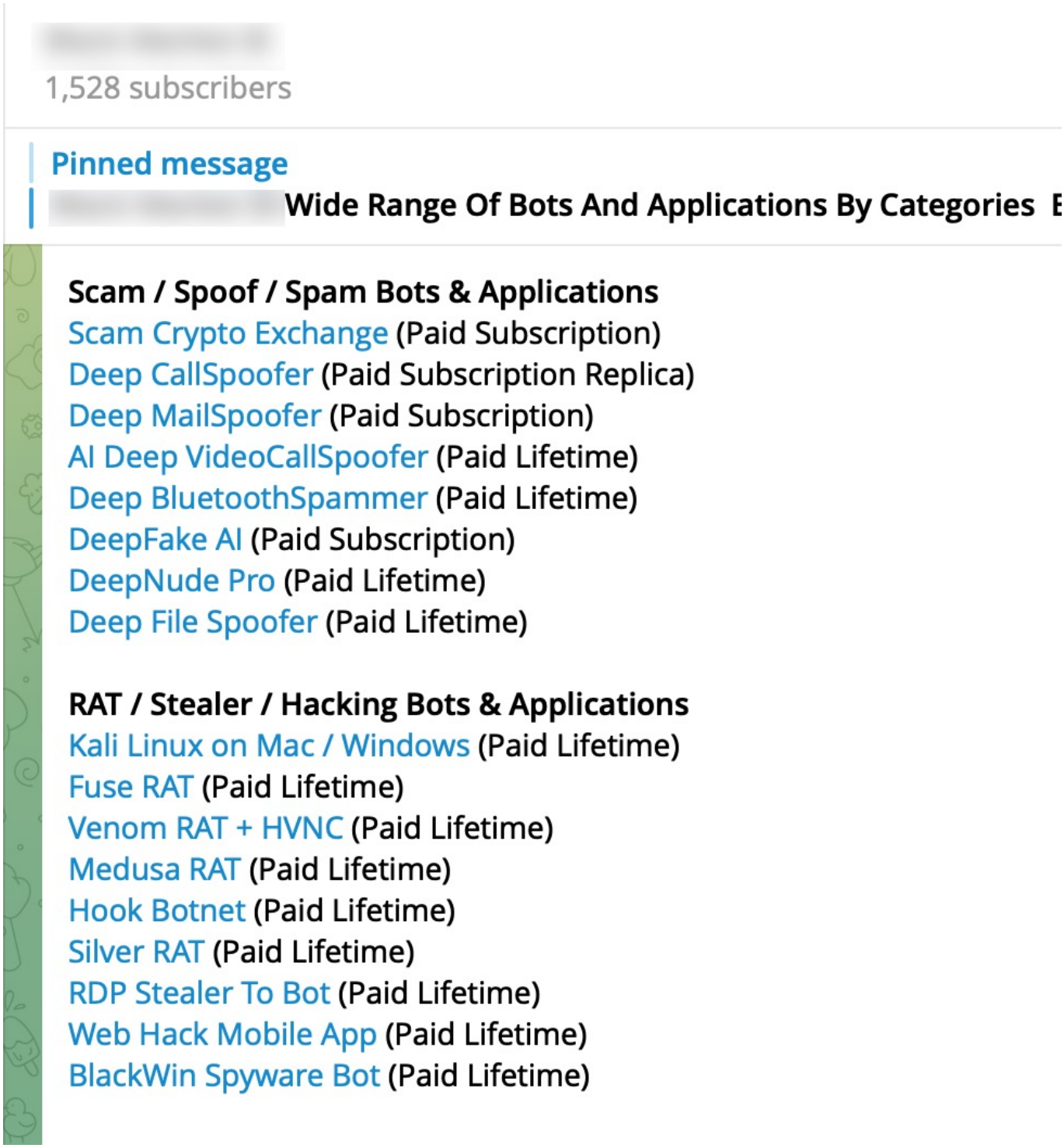


We have seen that deepfakes have been frequently used for disinformation especially during the Russia-Ukraine war, fraud, and parody purposes in recent years. On the other hand, when we look at forums and Telegram channels

where scammers and threat actors are frequently present, it is noticeable that messages shared about deepfakes and fraud services have increased. Naturally, this increase also raises the risk for individuals spending time on social networks to fall victim to such frauds and cyber attacks.





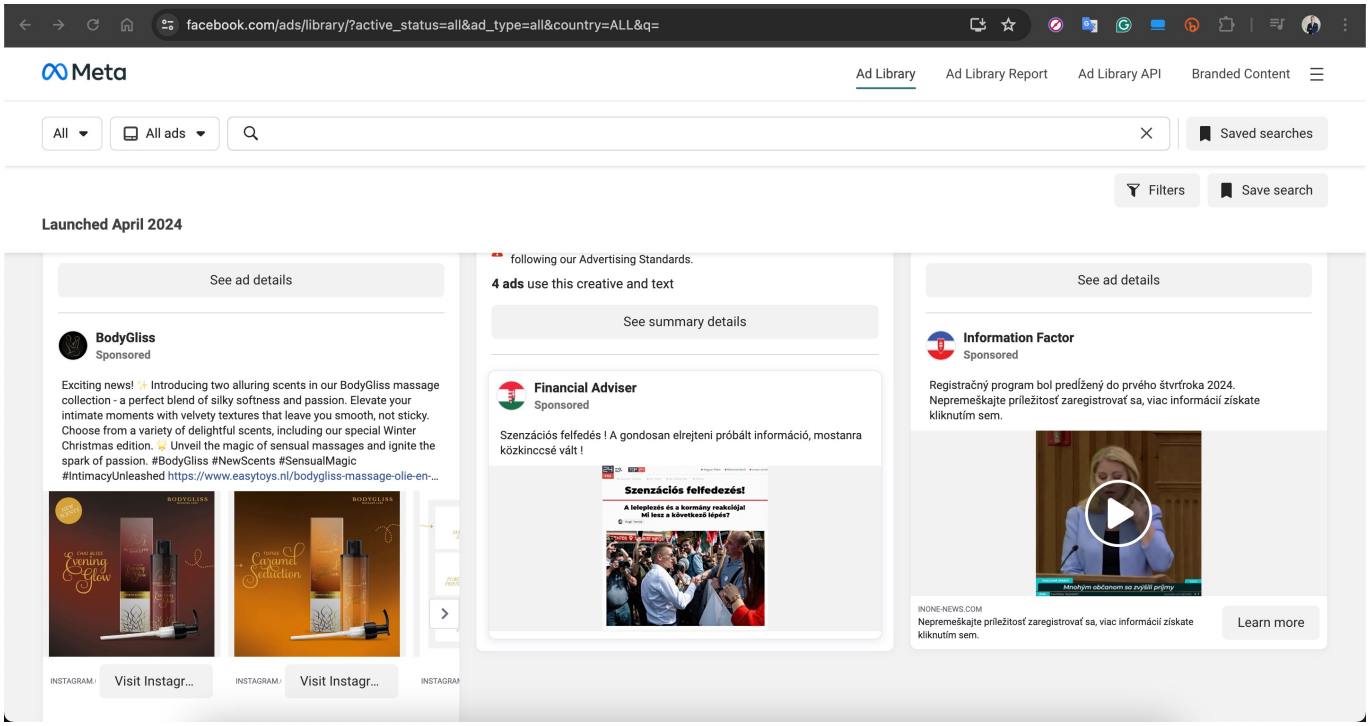


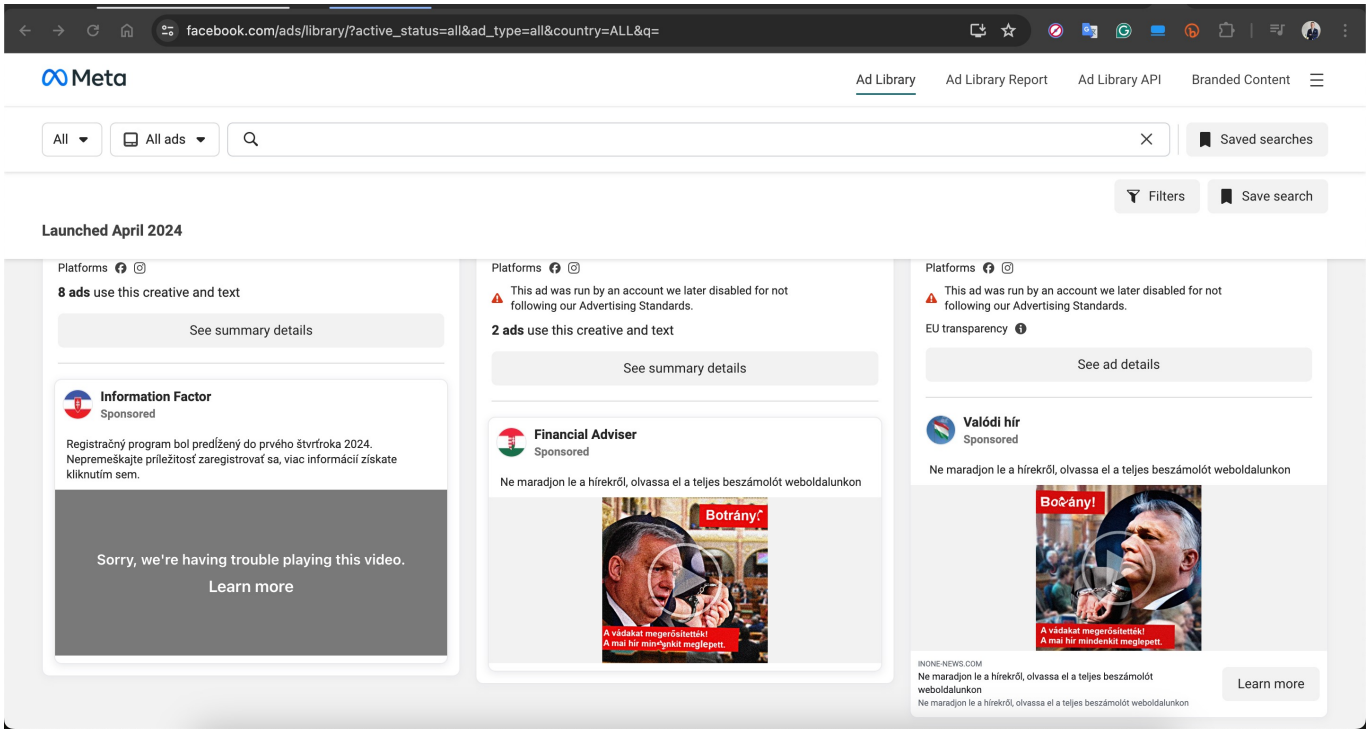
The Deepfake Gang

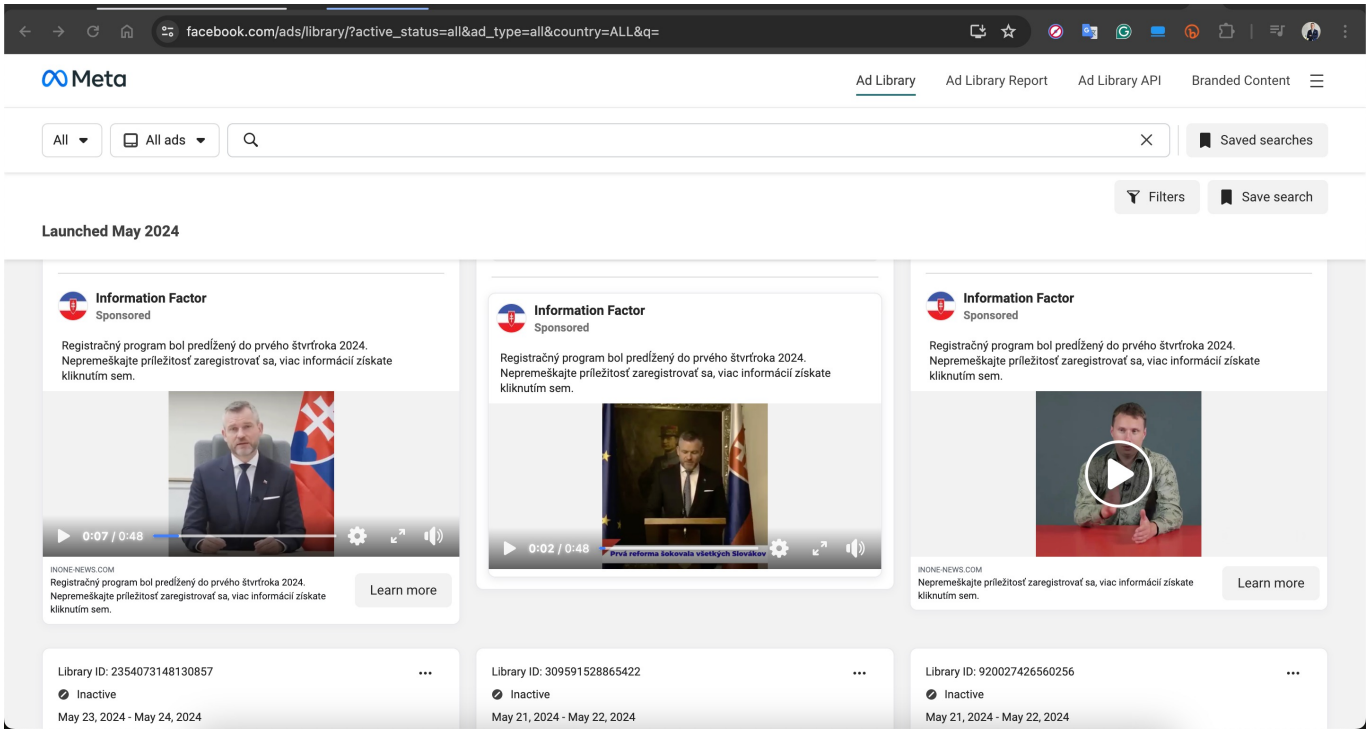
If you work at or receive services from a cyber threat intelligence firm like SOCRadar, which tracks the activities of threat actors and scammers and provides 24/7 intelligence to its clients, you have the opportunity to closely follow and stay informed about the suspicious and harmful activities carried out by malicious individuals across various platforms.

Based on information I recently obtained, I began closely monitoring a fraud

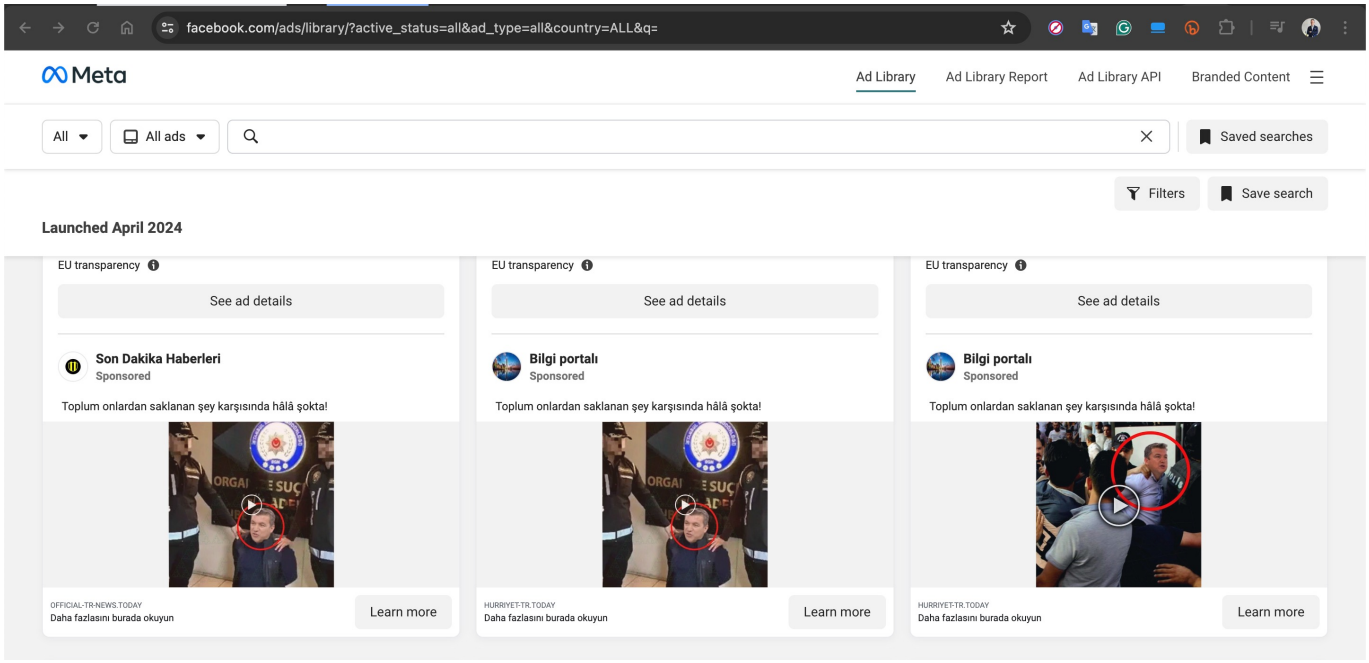
gang that I believe to be based in Russia, with the technical details of their operations to be covered in another article. Since October 2023, this gang has been attempting fraud by using the names of international organizations such as Slovnaft, INA d.d, Bosphorus Gaz, and defense companies like Baykar, as well as Interpol. They targeted their victims through fake ads on Facebook, Instagram, Messenger, which are platforms under Meta. Occasionally, they also placed fake ads on Google‘s search page. To ensnare the citizens of their targeted countries, this gang did not hesitate to use deepfake images and videos of politicians, business people, and news anchors.







For example, in their ads targeting Turkish citizens, they used deepfake images and videos of well-known figures such as Selçuk BAYRAKTAR, Acun ILICALI, İsmail KÜÇÜKKAYA.


facebook.com/ads/library/?active_status=all&ad_type=all&country=ALL&q=
Meta
Ad Library
Ad Library Report
Ad Library API
Branded Content
All
All ads
Saved searches
Filters
Save search
Launched April 2024
EU transparency
See ad details
Son Dakika Haberleri
Sponsored
Toplum onlardan saklanan şey karşısında hâlâ şokta!
OFFICIAL-TR-NEWS.TODAY
Daha fazlasını burada okuyun
Learn more
EU transparency
See ad details
Bilgi portalı
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Toplum onlardan saklanan şey karşısında hâlâ şokta!
HURRIYET-TR.TODAY
Daha fazlasını burada okuyun
Learn more
EU transparency
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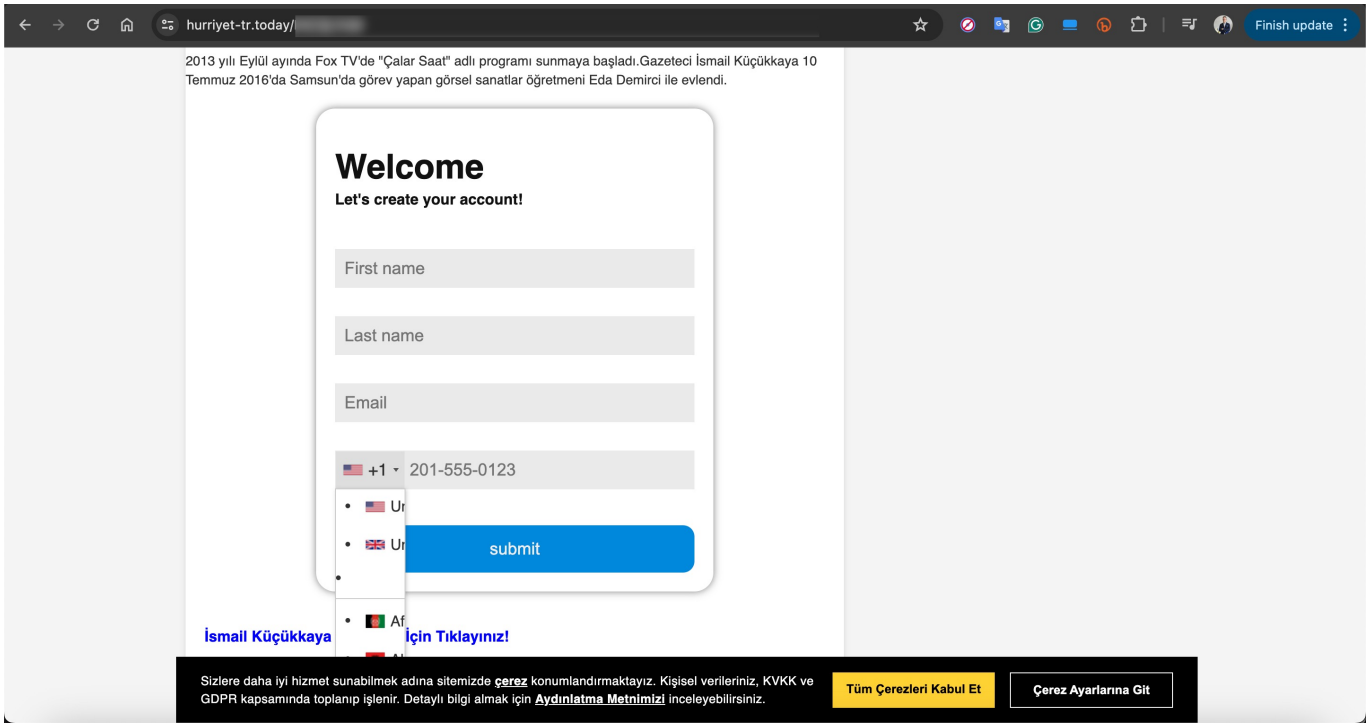
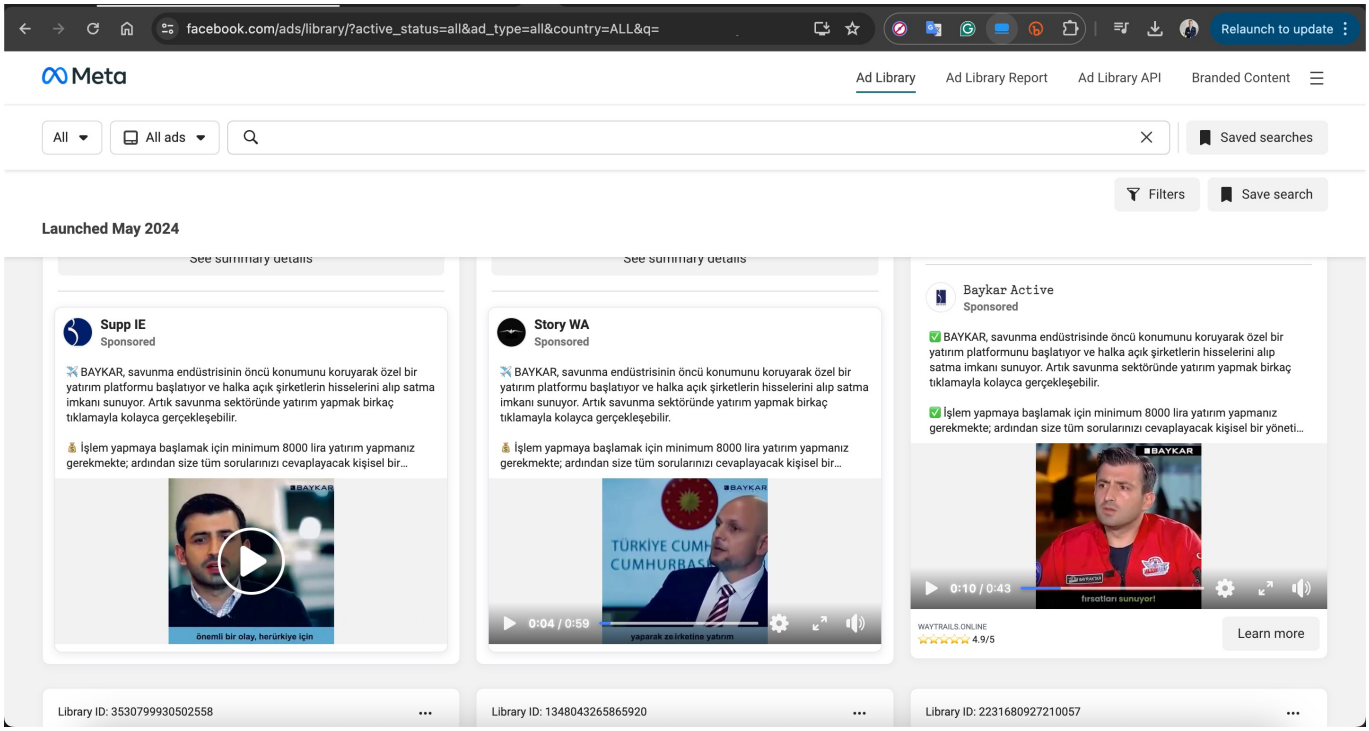
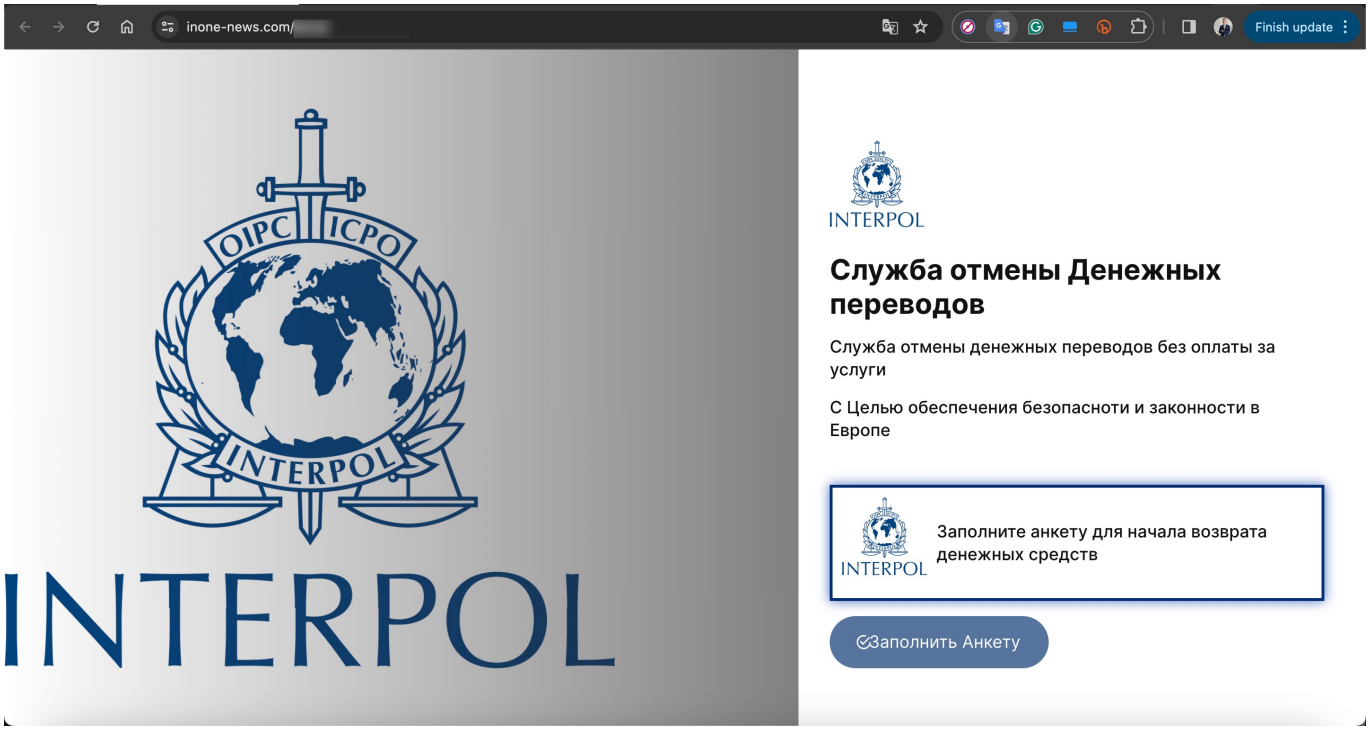
Toplum onlardan saklanan şey karşısında hâlâ şokta!
HURRIYET-TR.TODAY
Daha fazlasını burada okuyun
Learn more


hurriyet-tr.today/
Finish update
2013 yılı Eylül ayında Fox TV'de "Çalar Saat" adlı programı sunmaya başladı.Gazeteci İsmail Küçükkaya 10 Temmuz 2016'da Samsun'da görev yapan görsel sanatlar öğretmeni Eda Demirci ile evlendi.
Welcome
Let's create your account!
First name
Last name
Email
+1
201-555-0123
submit
İsmail Küçükkaya
için Tıklayınız!
Sizlere daha iyi hizmet sunabilmek adına sitemizde çerez konumlandırmaktayız. Kişisel verileriniz, KVKK ve GDPR kapsamında toplanıp işlenir. Detaylı bilgi almak için Aydınlatma Metnimizi inceleyebilirsiniz.
Tüm Çerezleri Kabul Et
Çerez Ayarlarına Git



In one of the deepfake videos, it was promised that with a minimum investment of 8000 TRY, one could earn up to 100,000 TRY per month. When visiting the associated links, you would sometimes encounter a very simple form asking only for your first name, last name, email address, and mobile phone number. Other times, you would see a more visually rich form with multiple-choice options designed to gather more information, followed by a message stating that an operator would contact you shortly.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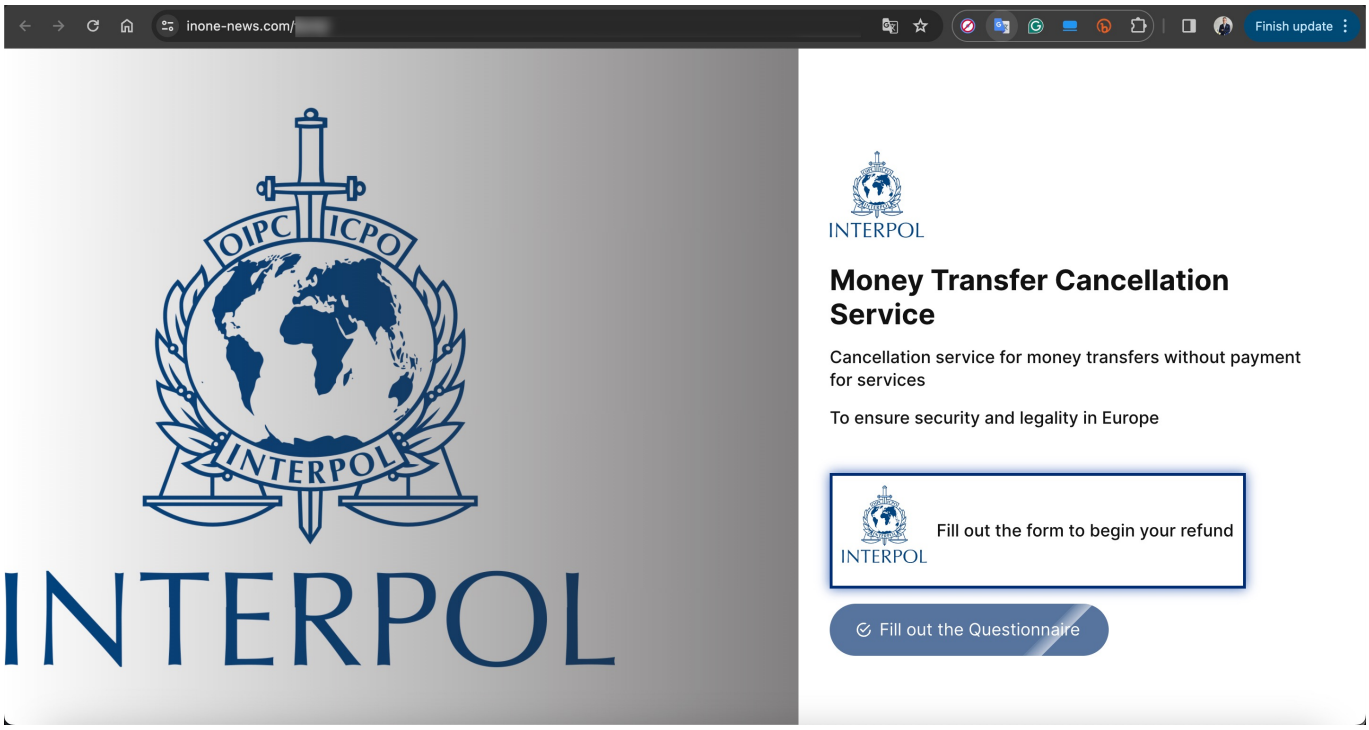
Finish update
INTERPOL
INTERPOL
Служба отмены Денежных переводов
Служба отмены денежных переводов без оплаты за услуги
С Целью обеспечения безопасноти и законности в Европе
INTERPOL
Заполните анкету для начала возврата денежных средств
Заполнить Анкету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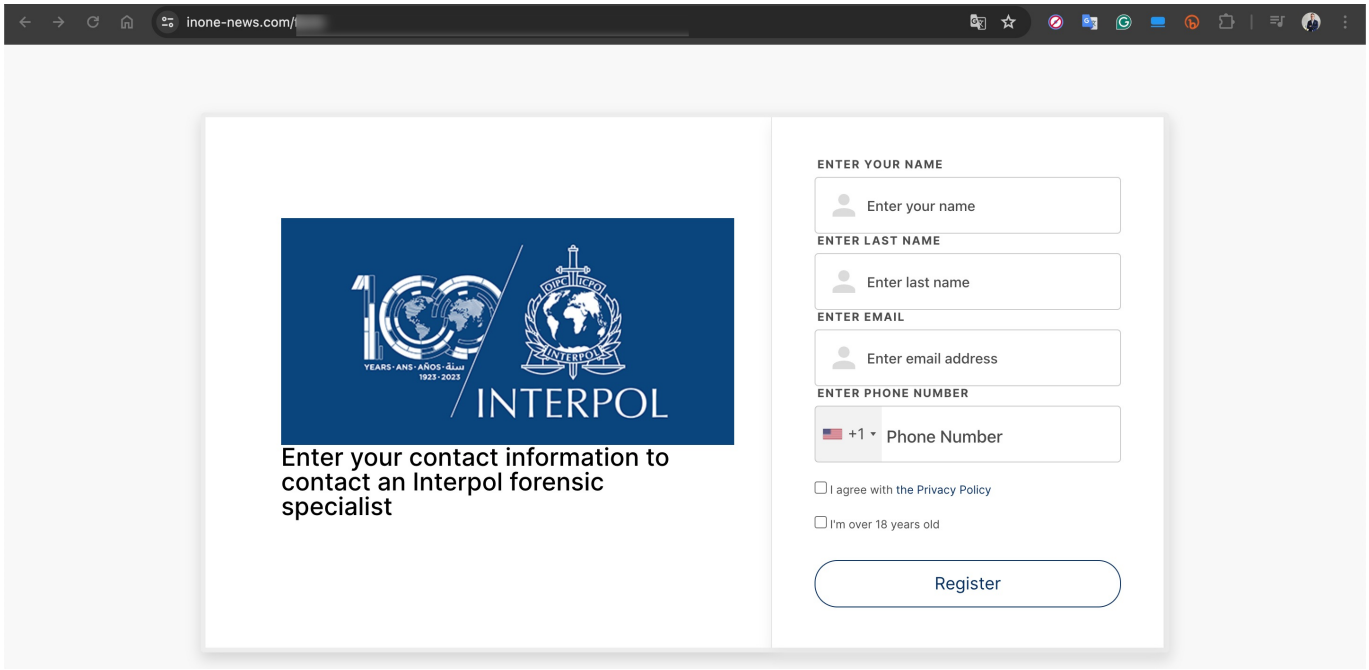
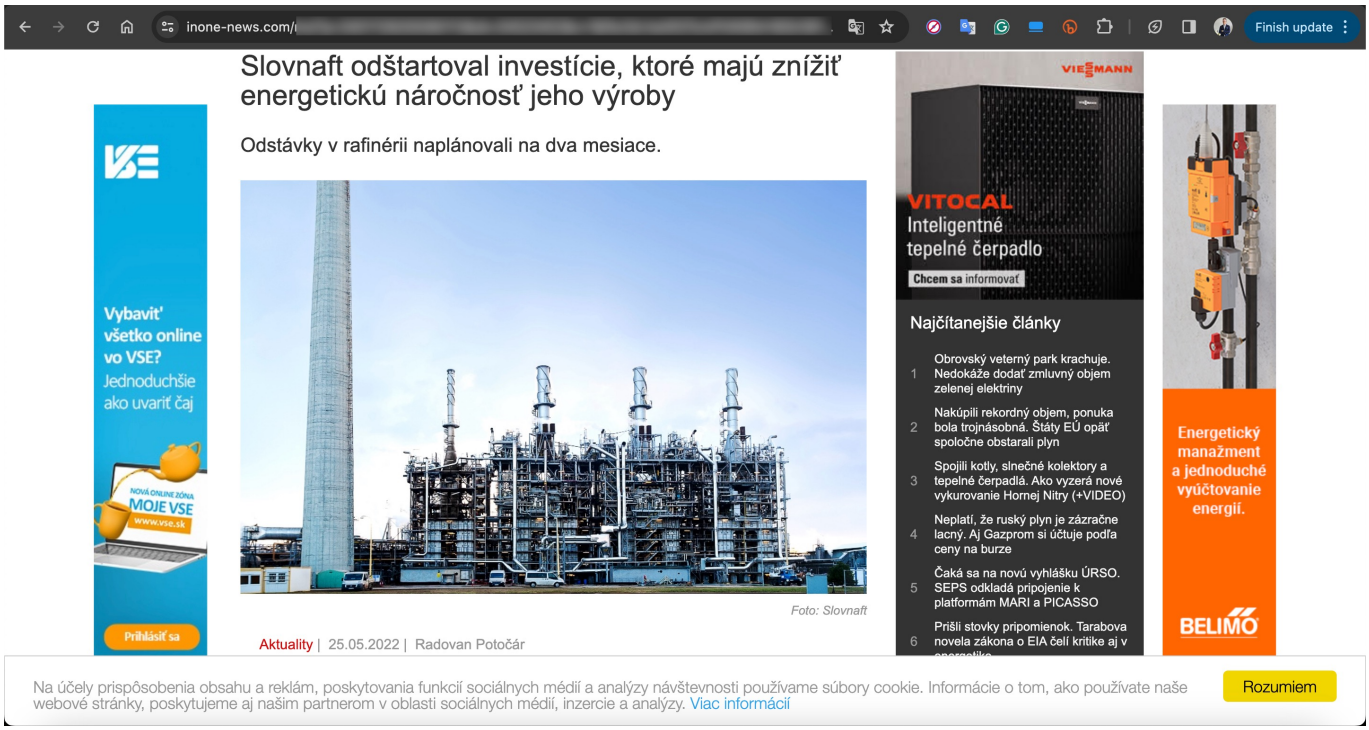
Finish update
INTERPOL
INTERPOL
Money Transfer Cancellation Service
Cancellation service for money transfers without payment for services
To ensure security and legality in Europe
INTERPOL
Fill out the form to begin your refund
Fill out the Questionnaire


inone-news.com/
INTERPOL
Enter your contact information to contact an Interpol forensic specialist
ENTER YOUR NAME
Enter your name
ENTER LAST NAME
Enter last name
ENTER EMAIL
Enter email address
ENTER PHONE NUMBER
+1
Phone Number
I agree with the Privacy Policy
I'm over 18 years old
Register

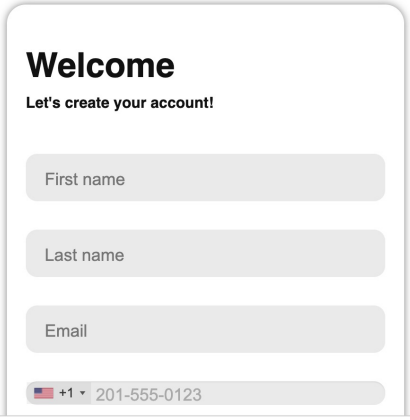

inone-news.com/
Finish update
Slovnaft odštartoval investície, ktoré majú znížiť energetickú náročnosť jeho výroby
Odstávky v rafinérii naplánovali na dva mesiace.
Foto: Slovnaft
Aktuality | 25.05.2022 | Radovan Potočár
Vybaviť všetko online vo VSE? Jednoduchšie ako uvariť čaj
Prihlásiť sa
VIESMANN
VITOCAL
Inteligentné tepelné čerpadlo
Chcem sa informovať
Najčítanejšie články
1 Obrovský veterný park krachuje. Nedokáže dodať zmluvný objem zelenej elektriny
2 Nakúpili rekordný objem, ponuka bola trojnásobná. Štáty EÚ opäť spoločne obstarali plyn
3 Spojili kotly, slnečné kolektory a tepelné čerpadlá. Ako vyzerá nové vykurovanie Hornej Nitry (+VIDEO)
4 Neplatí, že ruský plyn je zázračne lacný. Aj Gazprom si účtuje podľa ceny na burze
5 Čaká sa na novú vyhlášku ÚRSO. SEPS odkladá pripojenie k platformám MARI a PICASSO
6 Prišli stovky pripomienok. Tarabova novela zákona o EIA čelí kritike aj v
Energetický manažment a jednoduché vyúčtovanie energií.
BELIMO
Na účely prispôsobenia obsahu a reklám, poskytovania funkcií sociálnych médií a analýzy návštevnosti používame súbory cookie. Informácie o tom, ako používate naše webové stránky, poskytujeme aj našim partnerom v oblasti sociálnych médií, inzercie a analýzy. Viac informácií
Rozumiem

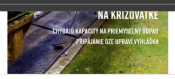
inone-news.com/

Finish update

Investujú 36 miliónov eur

„Údržba a modernizácia zahŕňa rafinérske výrobné jednotky destilácie a hydrokrakovania, a tiež kľúčové výrobné jednotky petrochémie, vrátane výrobnej jednotky na výrobu plastov LDPE4, ktorá patrí k najmodernejším v Európe," priblížil manažér Riadenia projektov a plánovaných odstávok spoločnosti Slovnaft Lukáš Noskovič.





obsah aktuálneho čísla

Novinky e-mailom

Zadajte váš e-mail a my Vám budeme zasielať len najdôležitejšie informácie. (max. 1 x týždenne)

Váš e-mail ...

Odoberať novinky

Najbližšie podujatie

Energetické spoločenstvá a zdieľanie elektriny

14. marca 2024

Podujatie efocus.sk, na ktorom odborníci v energetike pomôžu účastníkom konferencie vykonať kroky smerujúce k vytvoreniu energetickej

Energetický manažment a jednoduché vyúčtovanie energií.

BELIMO

Na účely prispôsobenia obsahu a reklám, poskytovania funkcií sociálnych médií a analýzy návštevnosti používame súbory cookie. Informácie o tom, ako používate naše webové stránky, poskytujeme aj našim partnerom v oblasti sociálnych médií, inzercie a analýzy. Viac informácií

Rozumiem

inone-news.com/

Finish update

24 SATA

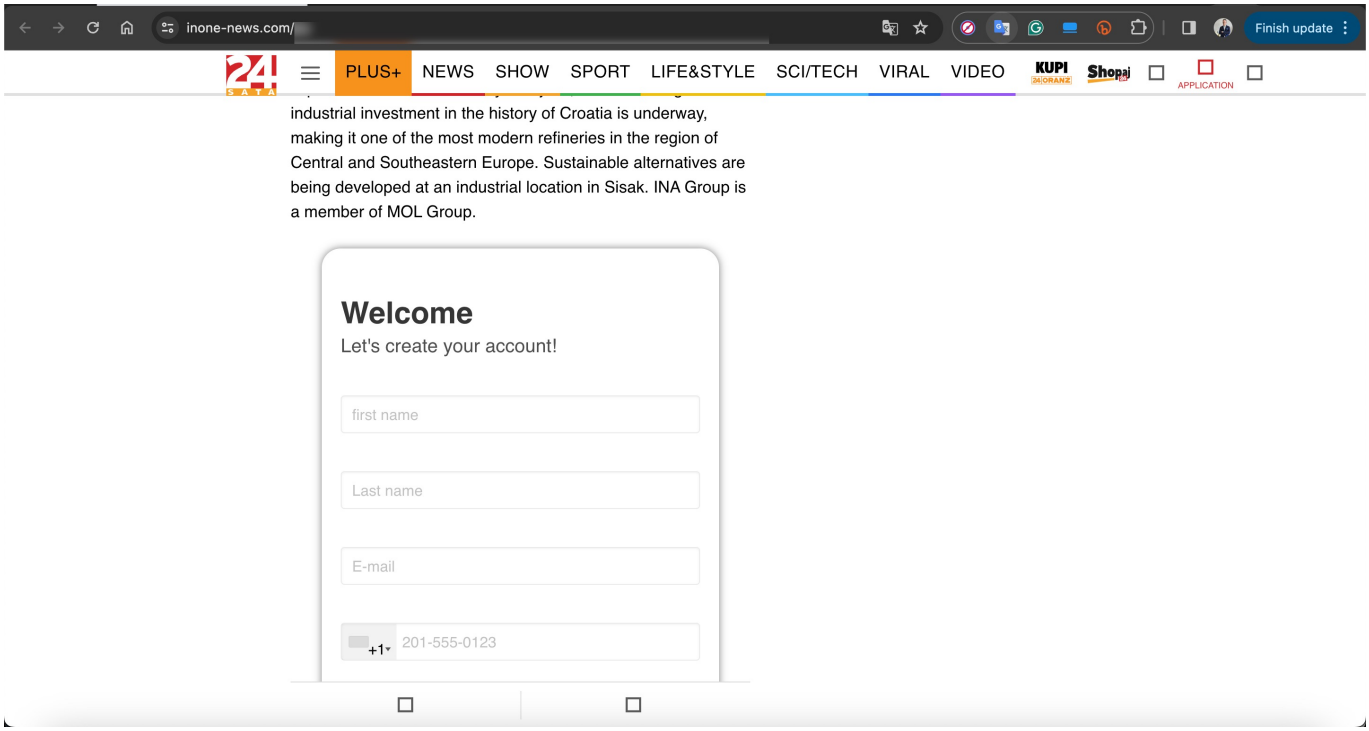
PLUS+ NEWS SHOW SPORT LIFE&STYLE SCI/TECH VIRAL VIDEO KUPI 24 ORANŽ Shopaj APPLICATION

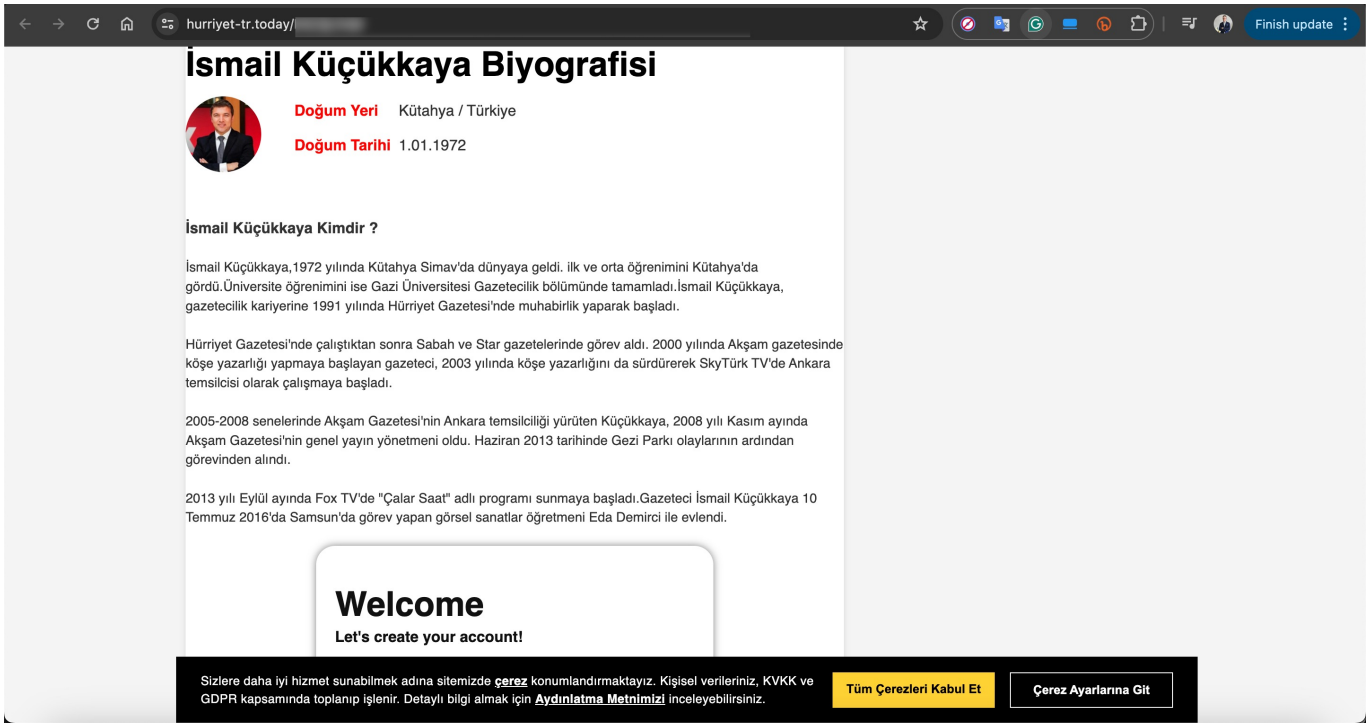
PROMO

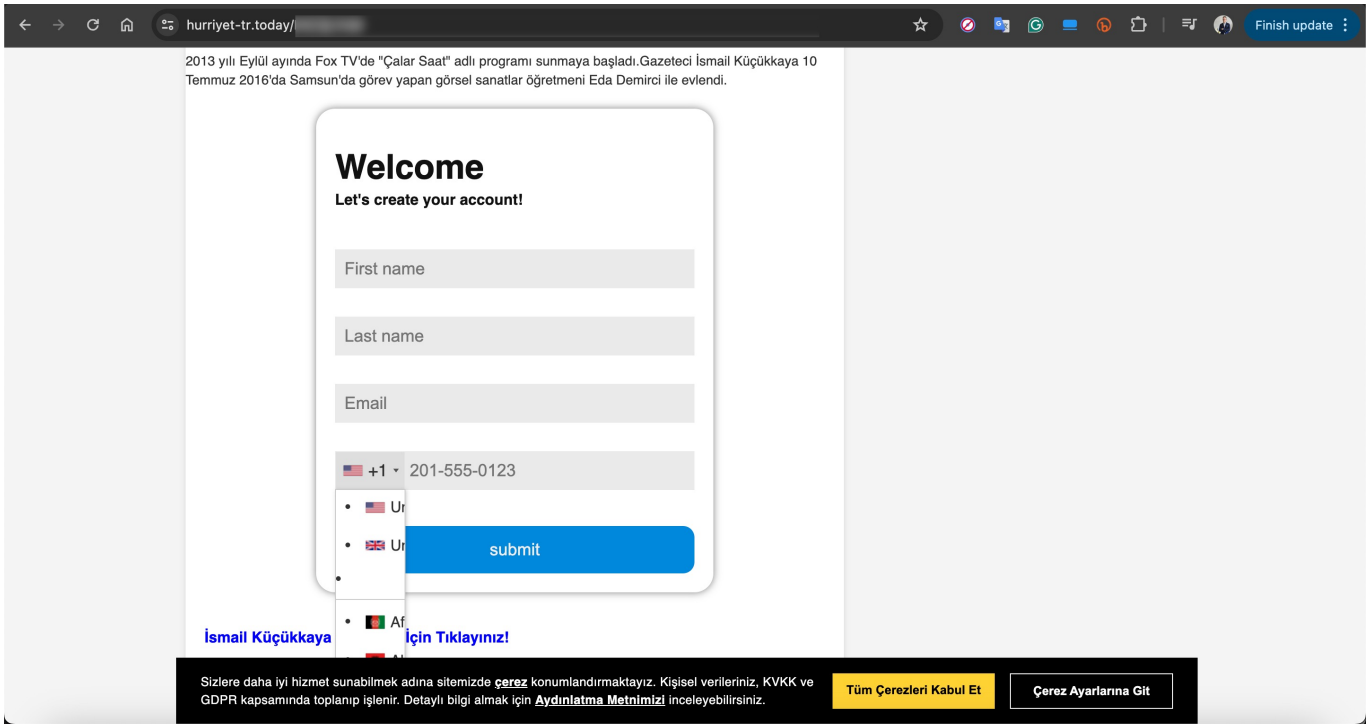
A Mercedes was presented to the lucky winner of Ina's prize draw

Sponsored article, Tuesday, 23.1.2024. at 10:39

Photo: INA


inone-news.com/
Finish update
PLUS+
NEWS
SHOW
SPORT
LIFE&STYLE
SCI/TECH
VIRAL
VIDEO
industrial investment in the history of Croatia is underway, making it one of the most modern refineries in the region of Central and Southeastern Europe. Sustainable alternatives are being developed at an industrial location in Sisak. INA Group is a member of MOL Group.
Welcome
Let's create your account!
first name
Last name
E-mail
+1
201-555-0123


hurriyet-tr.today/
Finish update
İsmail Küçükkaya Biyografisi
Doğum Yeri Kütahya / Türkiye
Doğum Tarihi 1.01.1972
İsmail Küçükkaya Kimdir ?
İsmail Küçükkaya,1972 yılında Kütahya Simav'da dünyaya geldi. ilk ve orta öğrenimini Kütahya'da gördü.Üniversite öğrenimini ise Gazi Üniversitesi Gazetecilik bölümünde tamamladı.İsmail Küçükkaya, gazetecilik kariyerine 1991 yılında Hürriyet Gazetesi'nde muhabirlik yaparak başladı.
Hürriyet Gazetesi'nde çalıştıktan sonra Sabah ve Star gazetelerinde görev aldı. 2000 yılında Akşam gazetesinde köşe yazarlığı yapmaya başlayan gazeteci, 2003 yılında köşe yazarlığını da sürdürerek SkyTürk TV'de Ankara temsilcisi olarak çalışmaya başladı.
2005-2008 senelerinde Akşam Gazetesi'nin Ankara temsilciliği yürüten Küçükkaya, 2008 yılı Kasım ayında Akşam Gazetesi'nin genel yayın yönetmeni oldu. Haziran 2013 tarihinde Gezi Parkı olaylarının ardından görevinden alındı.
2013 yılı Eylül ayında Fox TV'de "Çalar Saat" adlı programı sunmaya başladı.Gazeteci İsmail Küçükkaya 10 Temmuz 2016'da Samsun'da görev yapan görsel sanatlar öğretmeni Eda Demirci ile evlendi.
Welcome
Let's create your account!
Sizlere daha iyi hizmet sunabilmek adına sitemizde çerez konumlandırmaktayız. Kişisel verileriniz, KVKK ve GDPR kapsamında toplanıp işlenir. Detaylı bilgi almak için Aydınlatma Metnimizi inceleyebilirsiniz.
Tüm Çerezleri Kabul Et
Çerez Ayarlarına Git


hurriyet-tr.today/
Finish update
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Welcome
Let's create your account!
First name
Last name
Email
+1
201-555-0123
submit
İsmail Küçükkaya
için Tıklayınız!
Sizlere daha iyi hizmet sunabilmek adına sitemizde çerez konumlandırmaktayız. Kişisel verileriniz, KVKK ve GDPR kapsamında toplanıp işlenir. Detaylı bilgi almak için Aydınlatma Metnimizi inceleyebilirsiniz.
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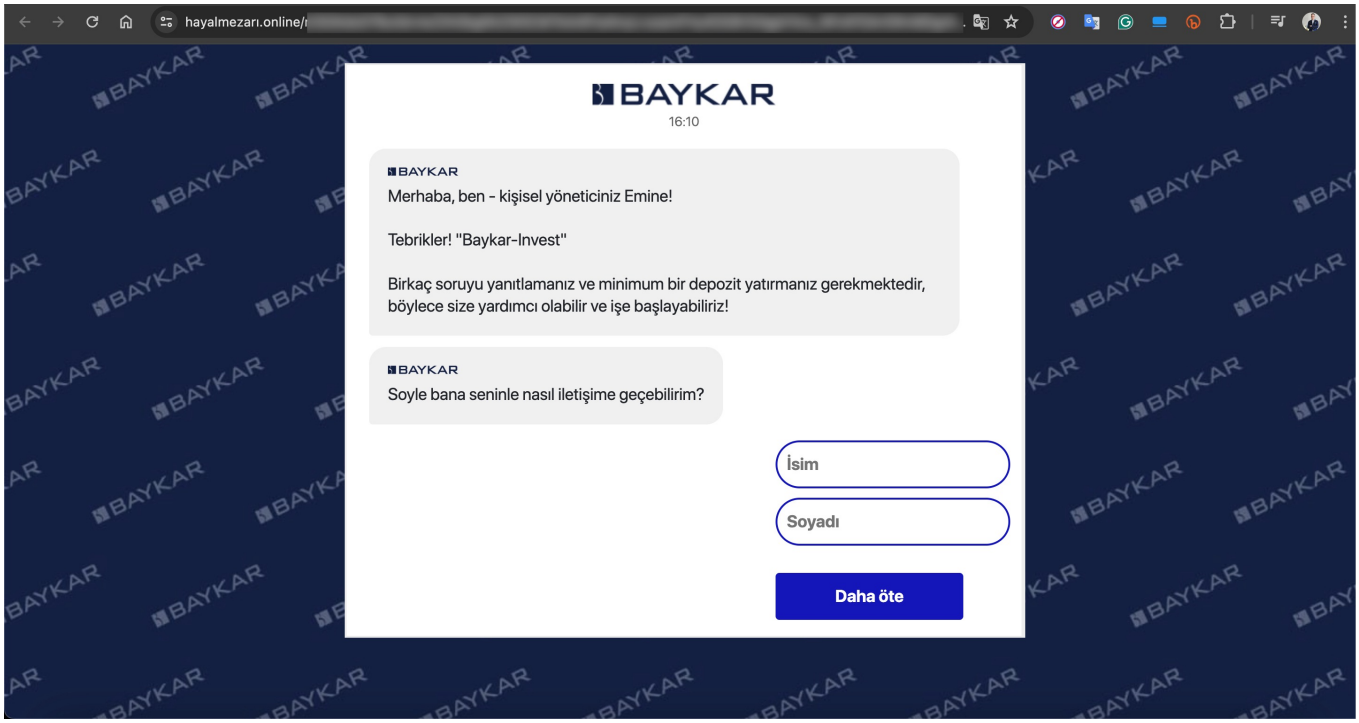
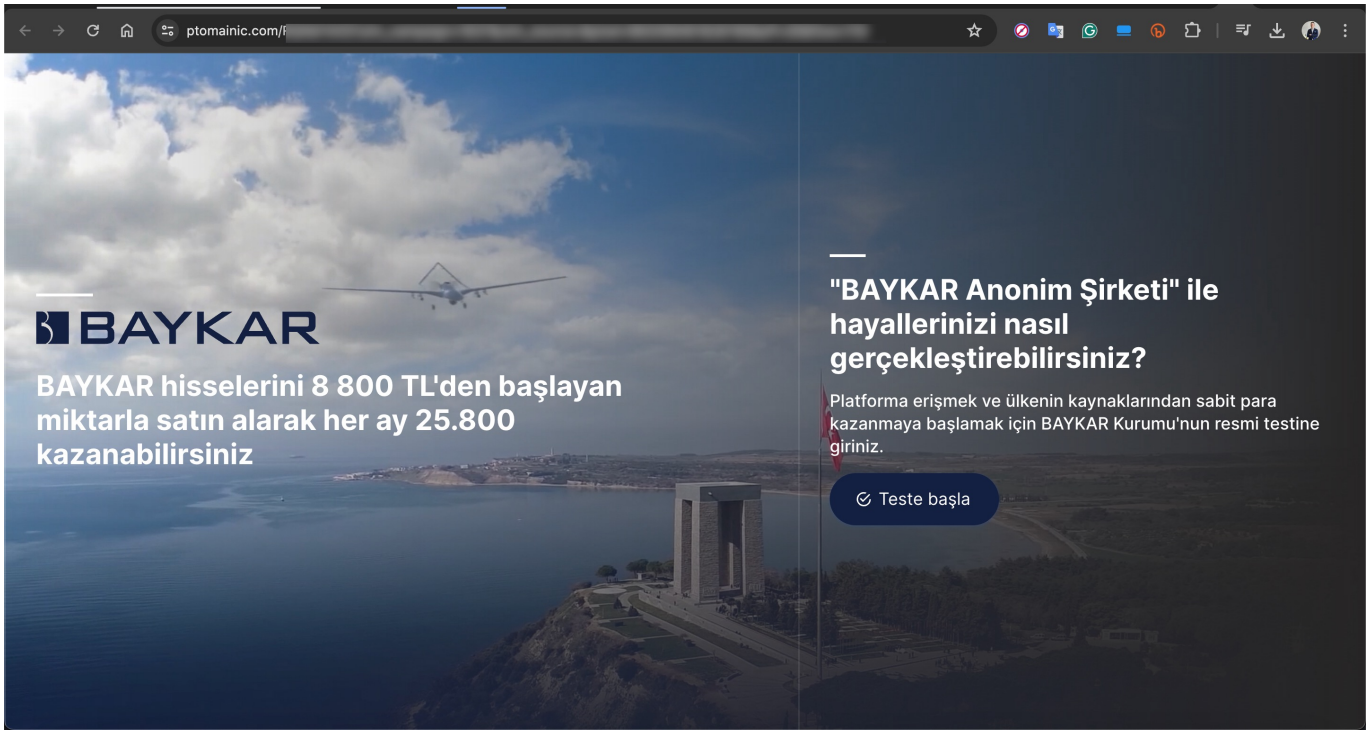
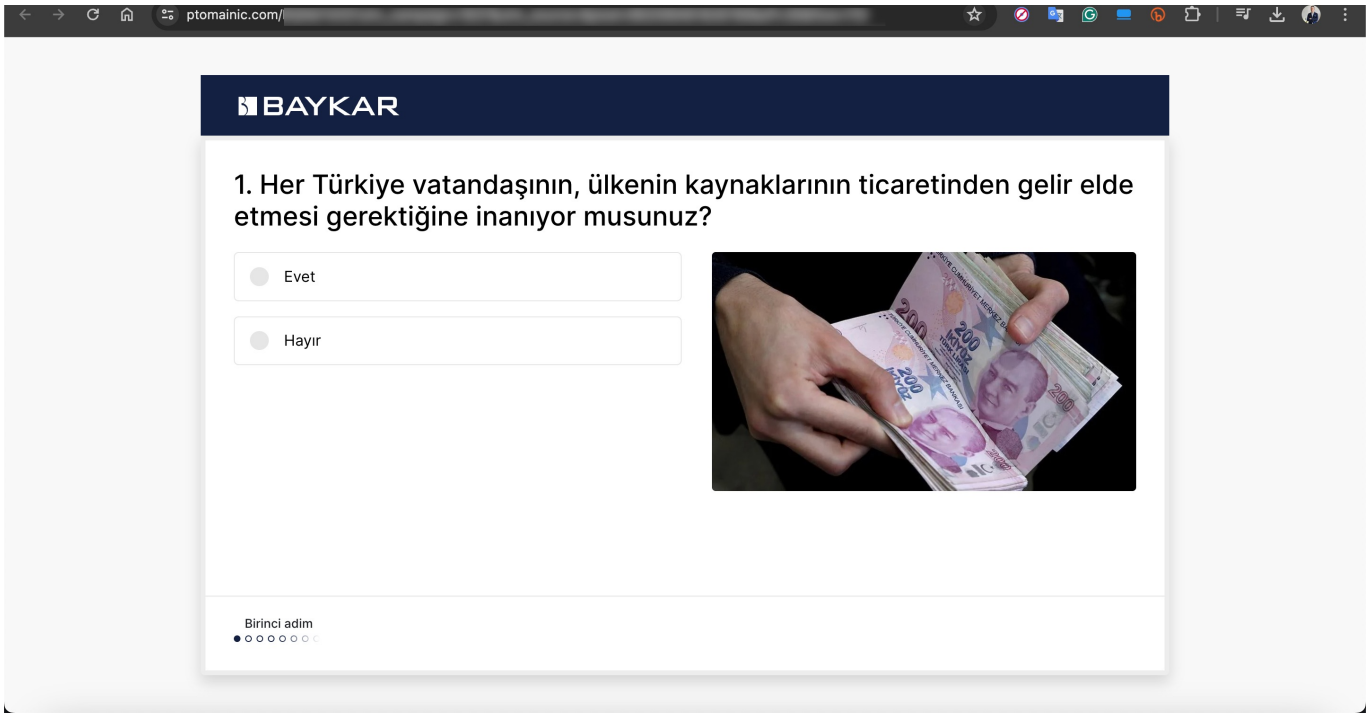
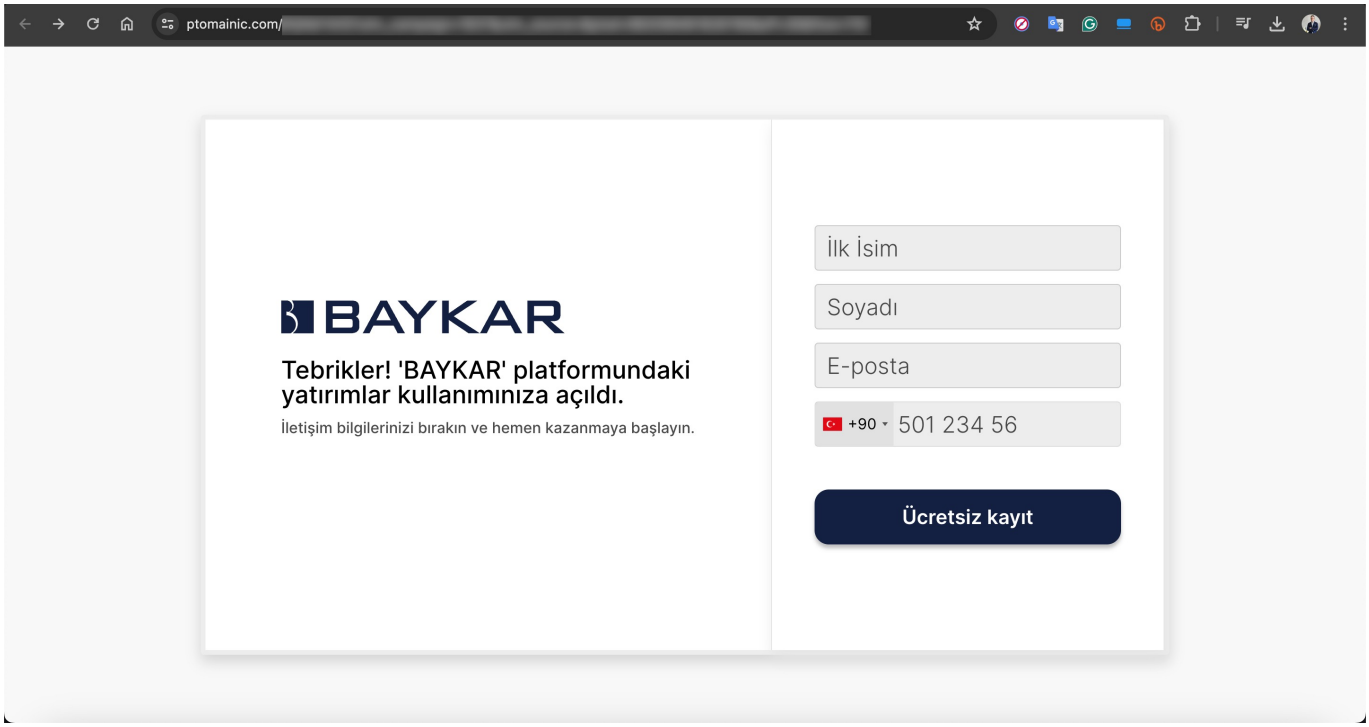
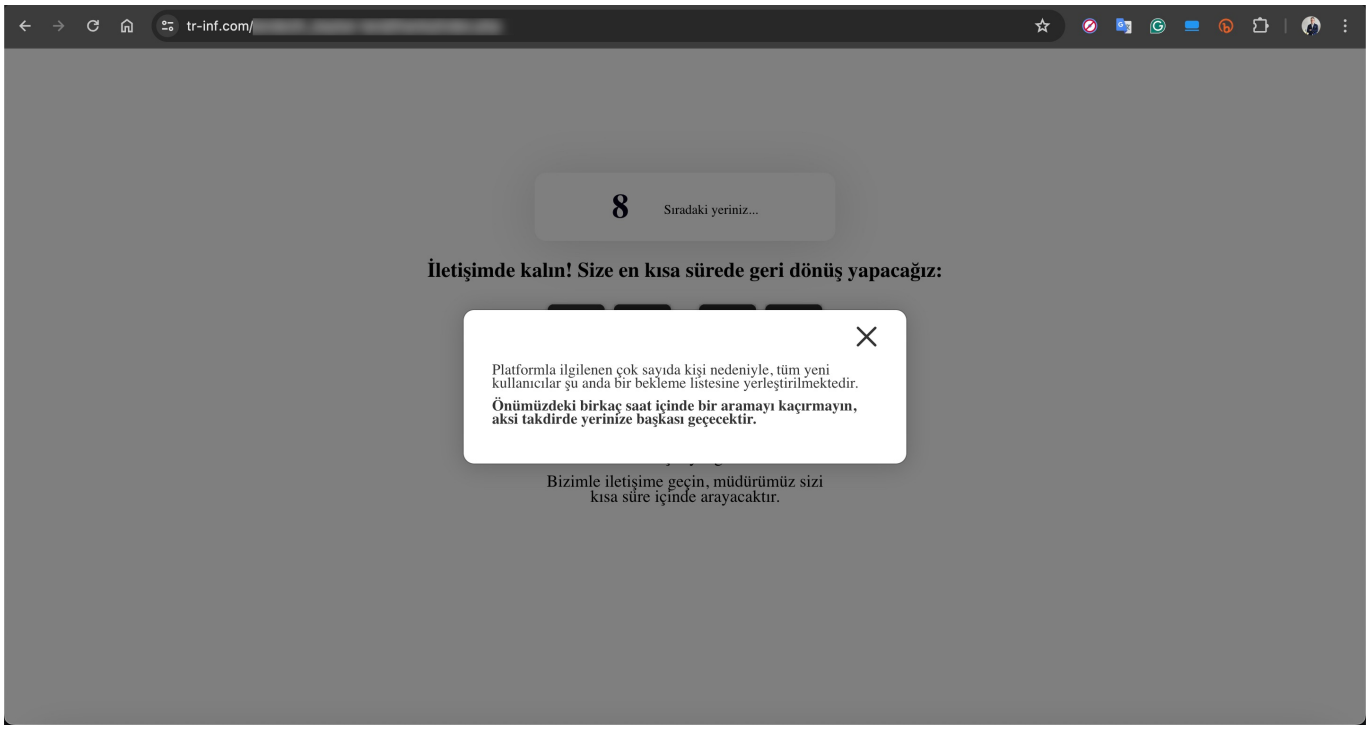
Çerez Ayarlarına Git


hayalmezarı.online/
BAYKAR
16:10
BAYKAR
Merhaba, ben - kişisel yöneticiniz Emine!
Tebrikler! "Baykar-Invest"
Birkaç soruyu yanıtlamanız ve minimum bir depozit yatırmanız gerekmektedir, böylece size yardımcı olabilir ve işe başlayabiliriz!
BAYKAR
Soyle bana seninle nasıl iletişime geçebilirim?
İsim
Soyadı
Daha öte


ptomainic.com/
BAYKAR
BAYKAR hisselerini 8 800 TL'den başlayan miktarla satın alarak her ay 25.800 kazanabilirsiniz
"BAYKAR Anonim Şirketi" ile hayallerinizi nasıl gerçekleştirebilirsiniz?
Platforma erişmek ve ülkenin kaynaklarından sabit para kazanmaya başlamak için BAYKAR Kurumu'nun resmi testine giriniz.
Teste başla

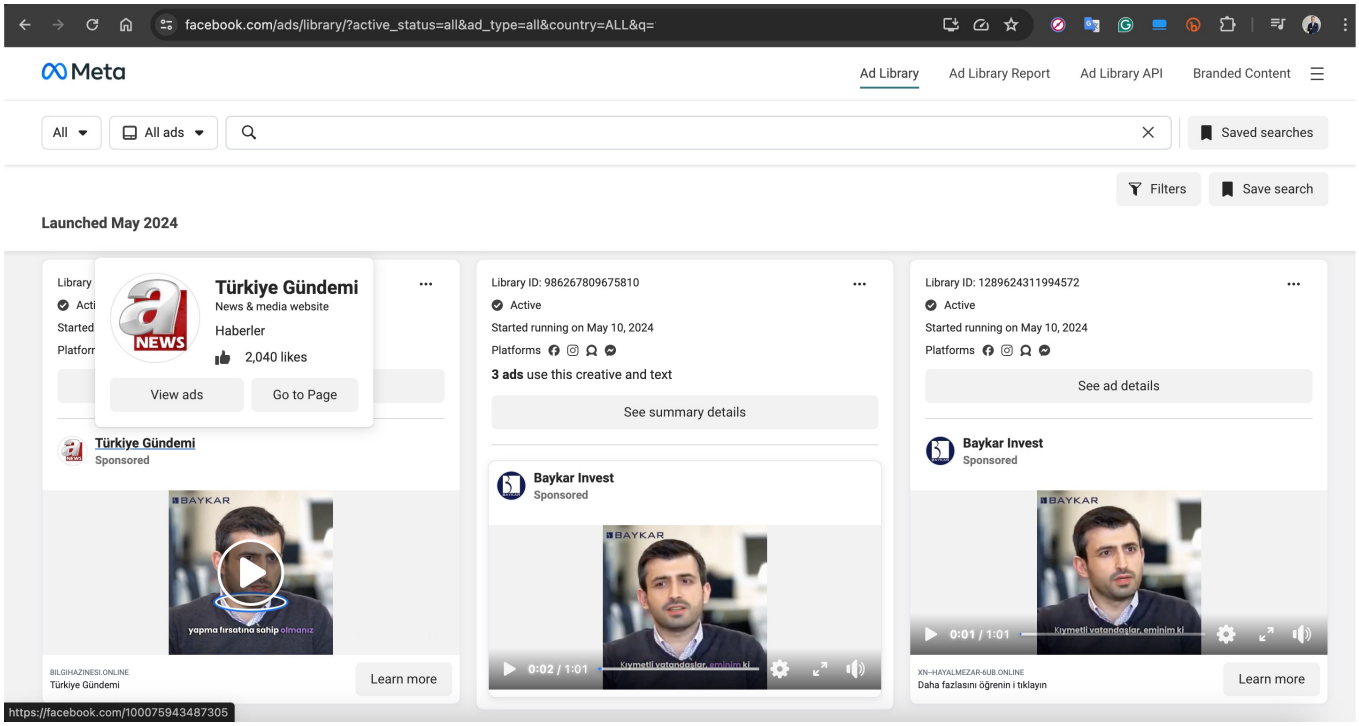

ptomainic.com/
BAYKAR
1. Her Türkiye vatandaşının, ülkenin kaynaklarının ticaretinden gelir elde etmesi gerektiğine inanıyor musunuz?
Evet
Hayır
Birinci adim





When examining the Facebook accounts used for these fake ads, it was highly likely that these accounts belonged to innocent individuals who had been hacked and repurposed for this scam. This could be easily understood by looking at the past photos and videos shared on the account.

For example, the Facebook profile named “Türkiye Gündemi” in the screenshot below, which impersonated the A News channel, revealed upon inspecting the “Mentions” page that the account originally belonged to a person named Nestor Soler and had been created in 2017.


facebook.com/ads/library/?active_status=all&ad_type=all&country=ALL&q=
Meta
Ad Library
Ad Library Report
Ad Library API
Branded Content
All
All ads
Saved searches
Filters
Save search
Launched May 2024
Türkiye Gündemi
News & media website
Haberler
2,040 likes
View ads
Go to Page
Türkiye Gündemi
Sponsored
Library ID: 986267809675810
Active
Started running on May 10, 2024
Platforms
3 ads use this creative and text
See summary details
Baykar Invest
Sponsored
Library ID: 1289624311994572
Active
Started running on May 10, 2024
Platforms
See ad details
Baykar Invest
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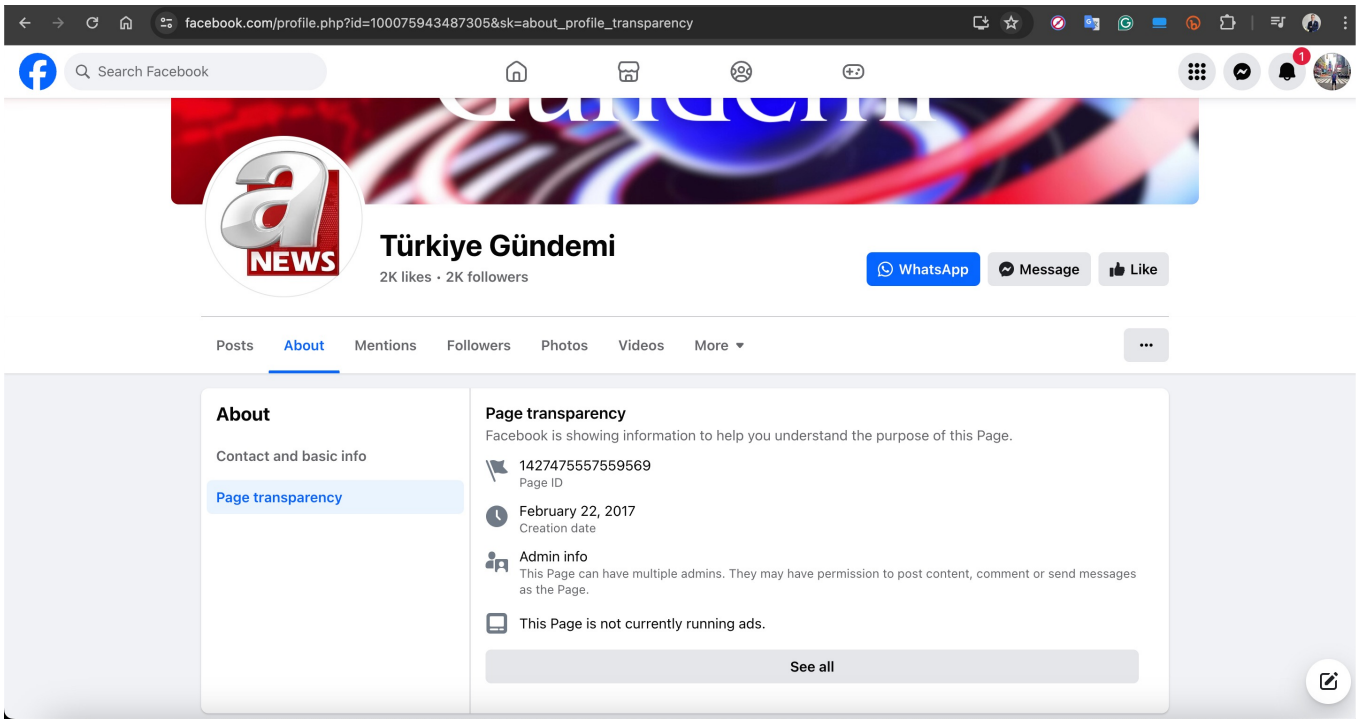
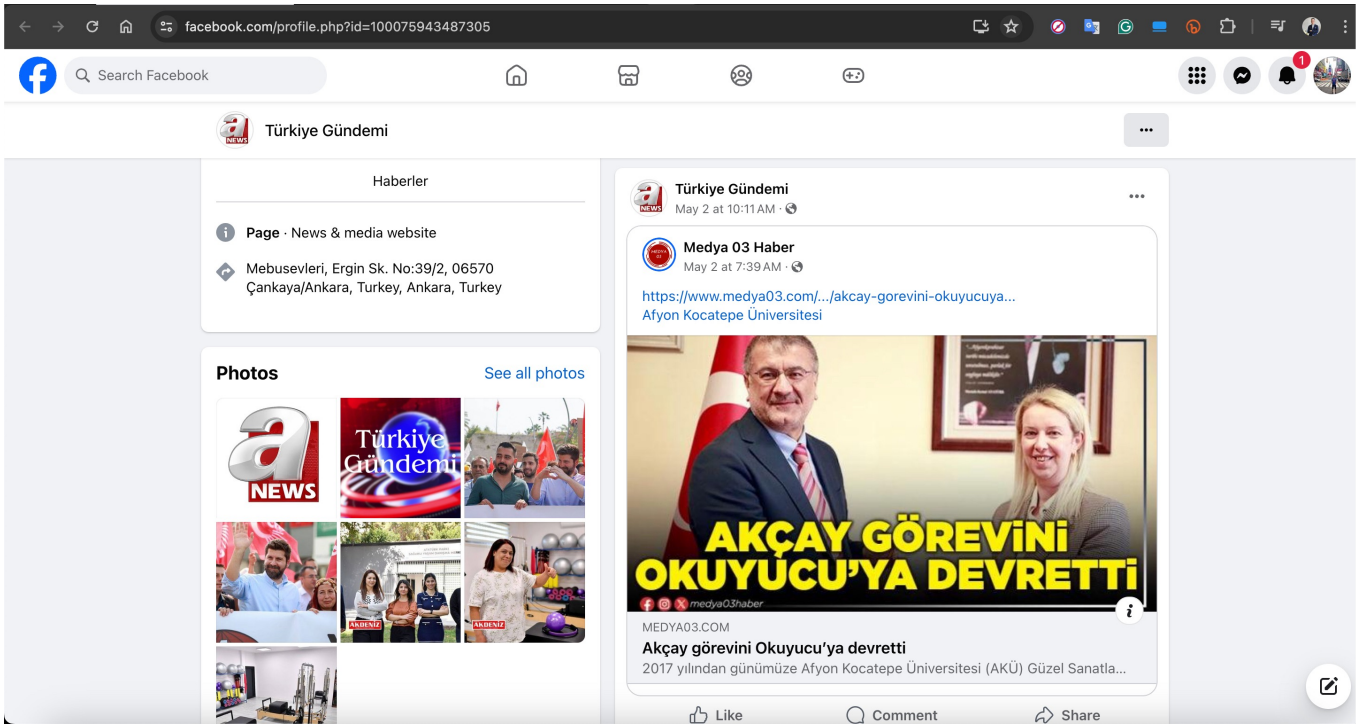
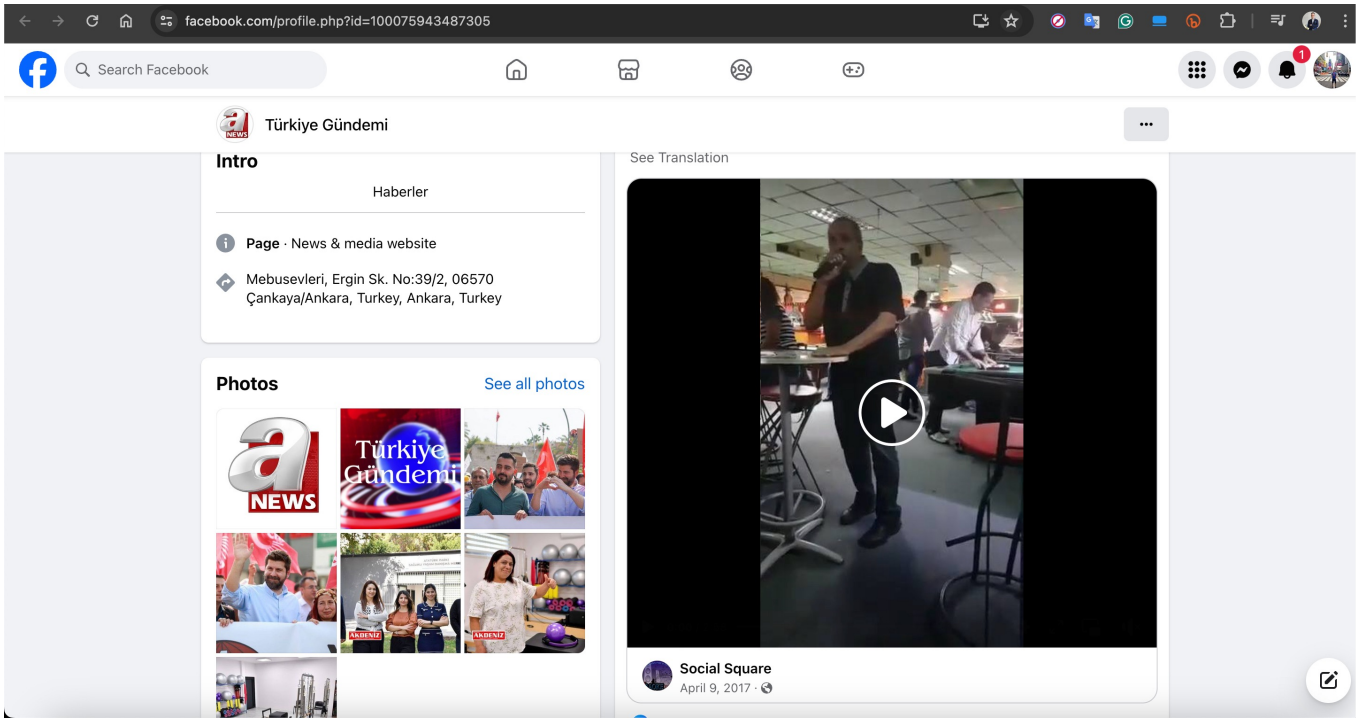
Learn more
Learn more
https://facebook.com/100075943487305


facebook.com/profile.php?id=100075943487305&sk=about_profile_transparency
Search Facebook
Türkiye Gündemi
2K likes · 2K followers
WhatsApp
Message
Like
Posts
About
Mentions
Followers
Photos
Videos
More
About
Contact and basic info
Page transparency
Page transparency
Facebook is showing information to help you understand the purpose of this Page.
1427475557559569
Page ID
February 22, 2017
Creation date
Admin info
This Page can have multiple admins. They may have permission to post content, comment or send messages as the Page.
This Page is not currently running ads.
See all


facebook.com/profile.php?id=100075943487305
Search Facebook
Türkiye Gündemi
Haberler
Page · News & media website
Mebusevleri, Ergin Sk. No:39/2, 06570
Çankaya/Ankara, Turkey, Ankara, Turkey
Photos
See all photos
Türkiye Gündemi
May 2 at 10:11 AM ·
Medya 03 Haber
May 2 at 7:39 AM ·
https://www.medya03.com/.../akcay-gorevini-okuyucuya...
Afyon Kocatepe Üniversitesi
AKÇAY GÖREVİNİ OKUYUCU'YA DEVRETTİ
MEDYA03.COM
Akçay görevini Okuyucu'ya devretti
2017 yılından günümüze Afyon Kocatepe Üniversitesi (AKÜ) Güzel Sanatla...
Like
Comment
Share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Search Facebook
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Intro
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Page · News & media website
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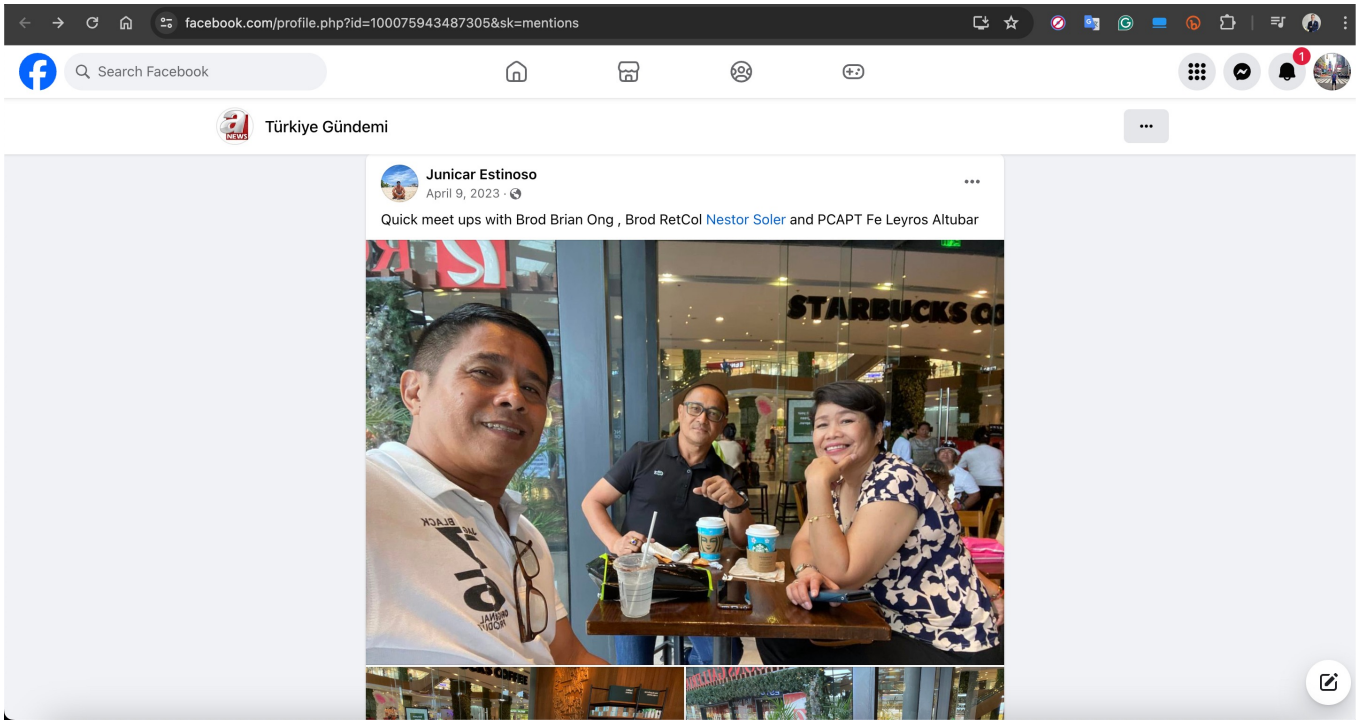
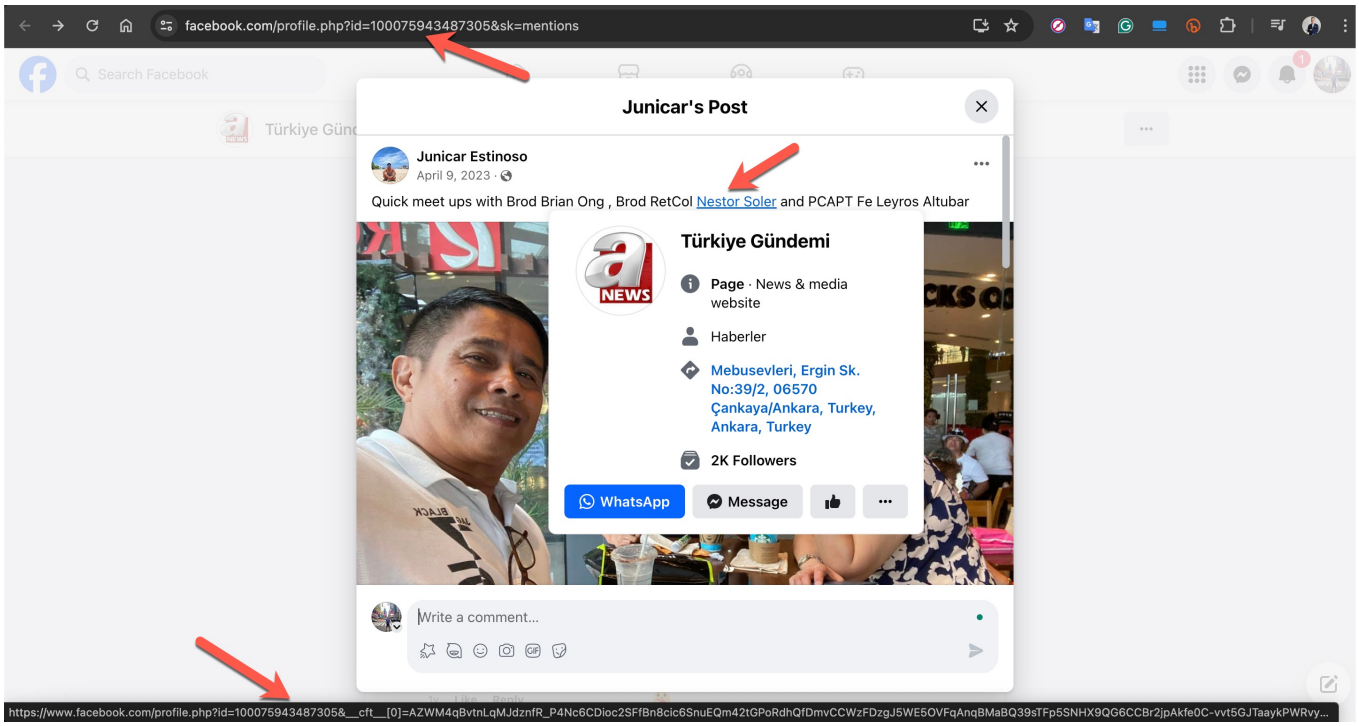
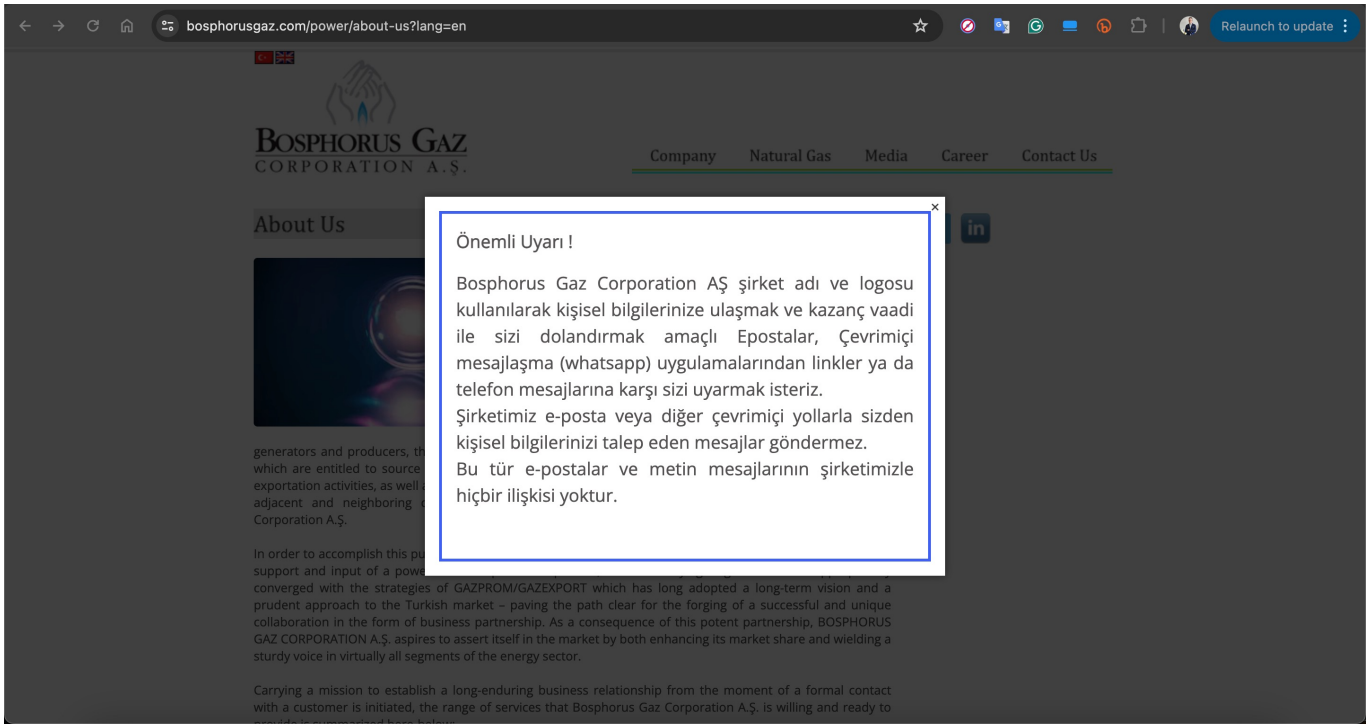
Çankaya/Ankara, Turkey, Ankara, Turkey
Photos
See all photos
See Translation
Social Square
April 9, 2017 ·





Within six months, a significant number of people in Turkey were likely targeted by this fraud method, prompting both Baykar and Bosphorus Gaz companies to issue public warnings to inform the public.



Combatting Deepfake

In the cyber world where avoiding falling victim to scams orchestrated using the latest technological advancements becomes increasingly challenging each day, how can videos suspected to be deepfakes be detected by end-users, experts, and journalists?

When it comes to detecting the aforementioned deepfake videos, it can be said that they are relatively easier to detect compared to other types of deepfakes. It is observed that academic studies are rapidly ongoing in this regard, and technology giants like Intel are implementing technologies such as FakeCatcher to address this issue. However, as accessing these corporate-oriented technologies may sometimes be impossible for end-users, the need to verify suspicious images and videos encountered by those who follow news on social media or shop online (much like the need to verify information today) becomes increasingly important day by day.

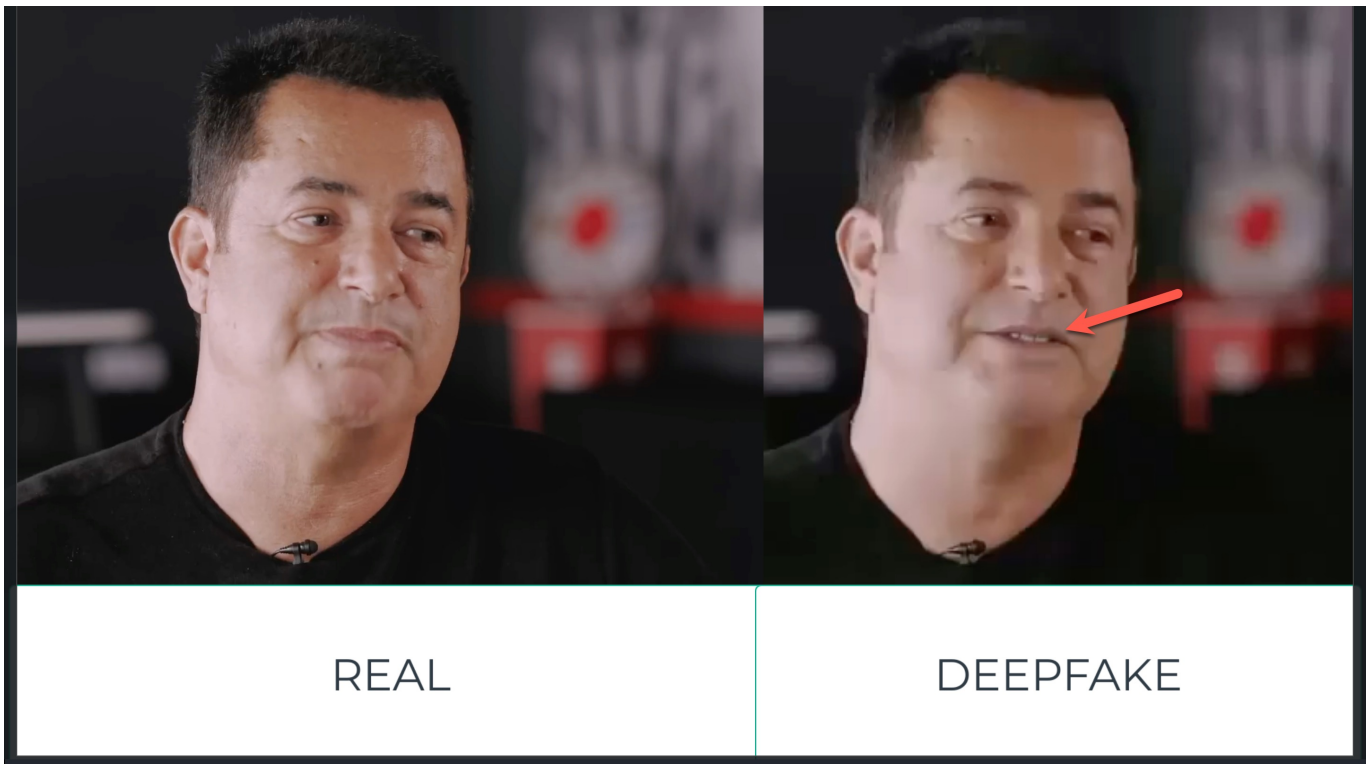
When listening to experts and authorities about what to pay attention to in order to determine whether an image or video is deepfake, the following points generally stand out:

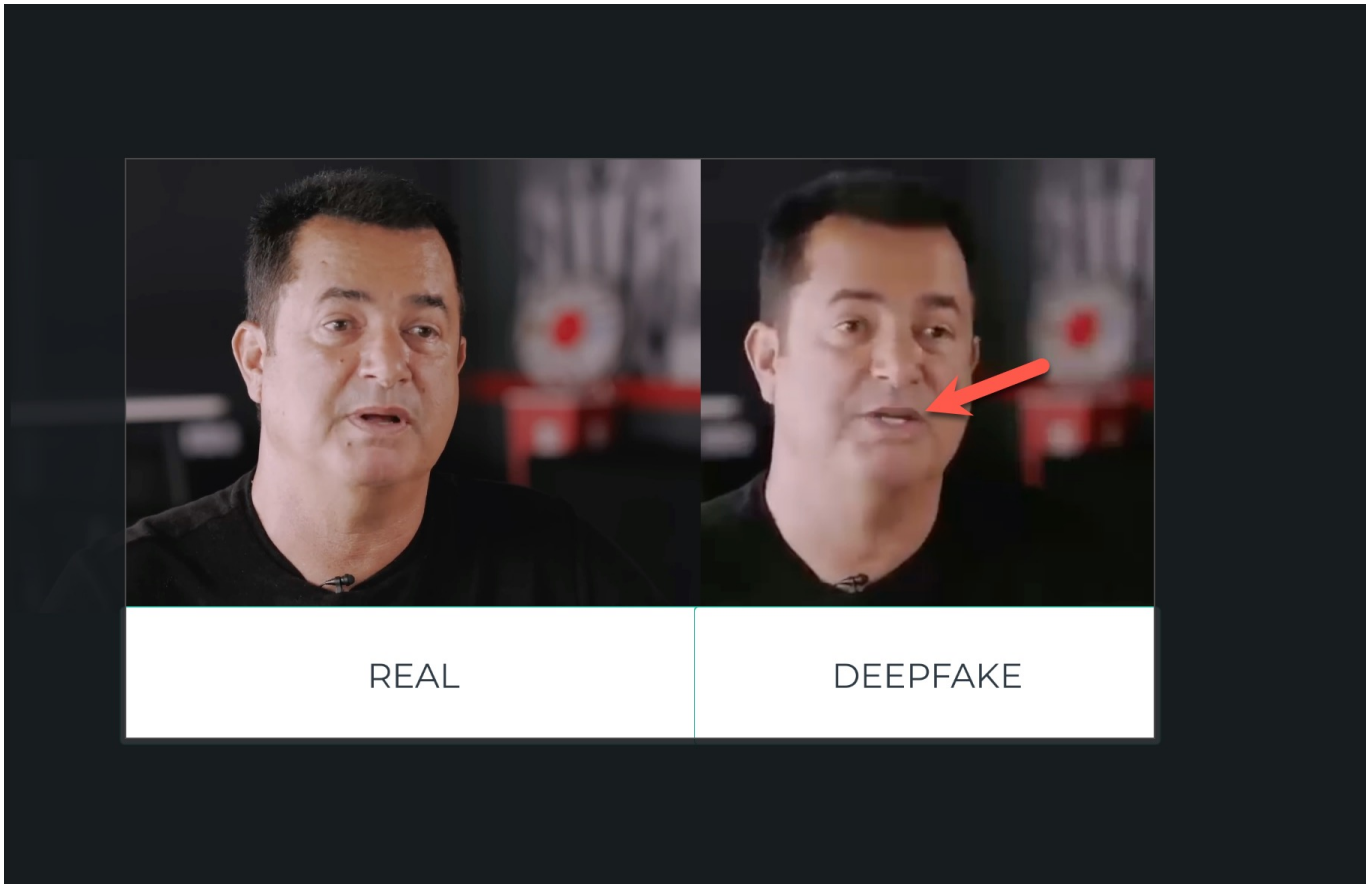
1. Blurring evident in the face but not elsewhere in the image or video (or vice-versa)
2. A change of skin tone near the edge of the face

3. Double chins, double eyebrows, or double edges to the face
4. Whether the face gets blurry when it is partially obscured by a hand or another object
5. Lower-quality sections throughout the same video
6. Box-like shapes and cropped effects around the mouth, eyes, and neck
7. Blinking (or lack thereof), movements that are not natural
8. Changes in the background and/or lighting
9. Contextual clues – Is the background scene consistent with the foreground and subject?

   To find out if these recommendations really work, when the real video of Acun ILICALI, who is targeted by fraudsters, is compared side by side with the deepfake video, the first item in the list, “Blurring evident,” indeed stands out immediately.

Similarly, when close-up scenes are placed side by side and advanced simultaneously, inconsistencies, especially in mouth movements, facial expressions, and the visibility of teeth, also raise suspicion.

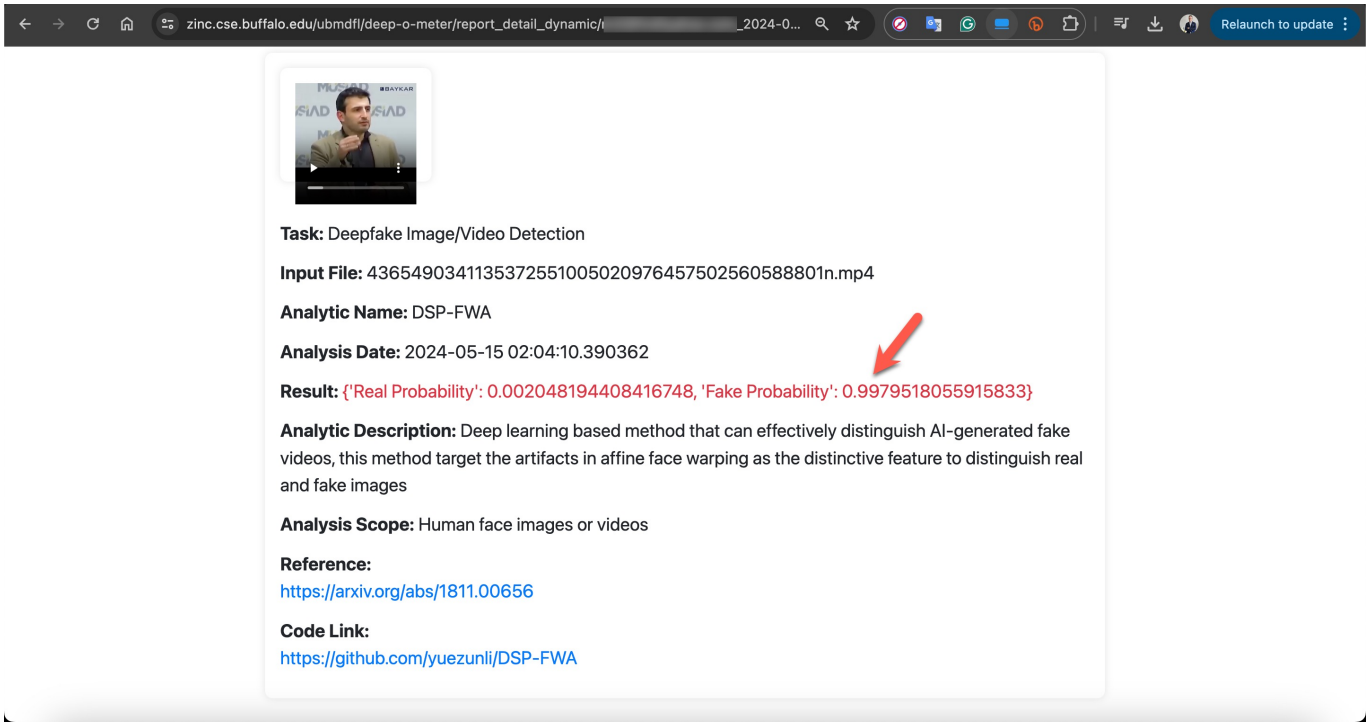


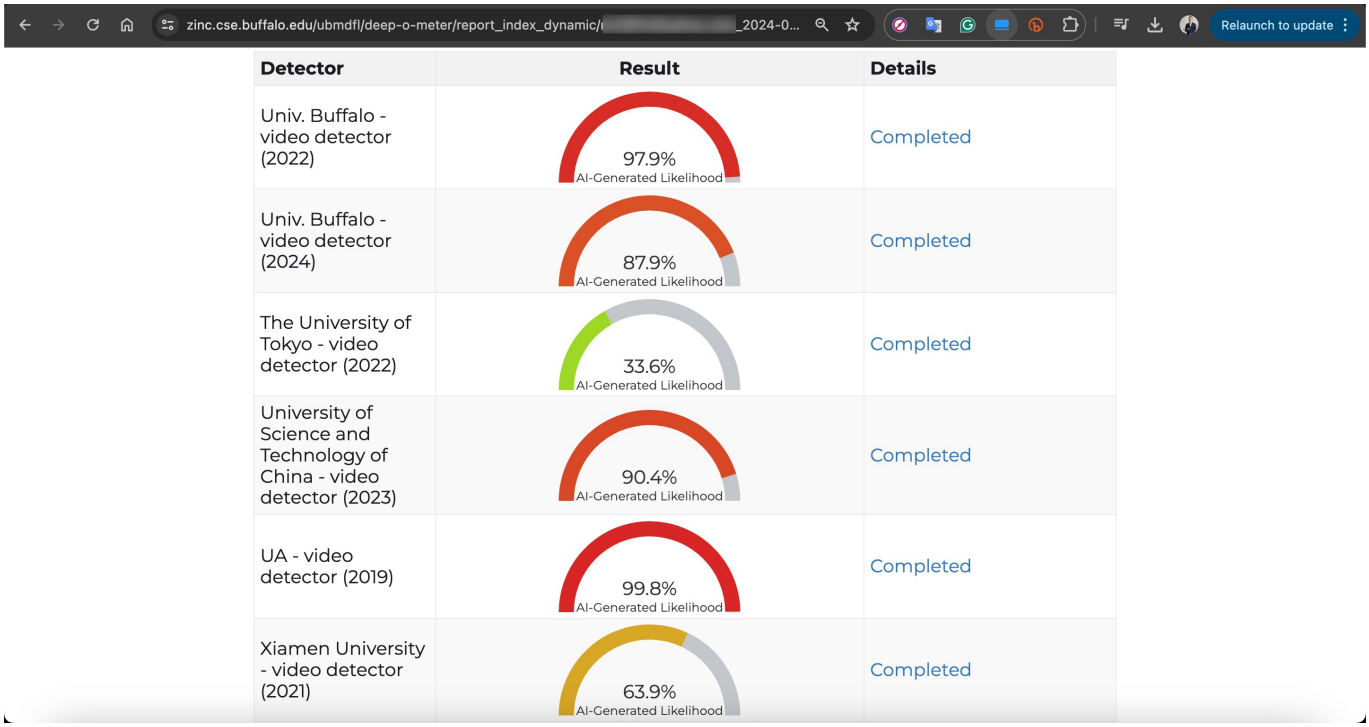


If you ask me if there are there any tools or applications that can detect these deepfake videos on your own system, I would recommend taking a look at the “Deepfake detection using Deep Learning” project.

For those who want to detect deepfake videos effortlessly and for free using multiple deepfake detection algorithms based on online and academic studies, I highly recommend the DeepFake-O-Meter application.

For instance, when I analyzed a deepfake video created by scammers using excerpts from Selçuk Bayraktar’s video on DeepFake-O-Meter, most of the algorithms clearly indicated that there were inconsistencies with this video, suggesting that I should be suspicious.





For those who want to detect such deepfake images and videos by just using a browser extension, the DeepfakeProof Chrome extension could be worth trying.

How Easy to Create a Deepfake Video?

Looking at the spreading of fake advertisements using deepfake videos over the past 6 months, it was evident that the process of creating these fake videos had to be excessively easy and low-cost or even free for fraudsters.

To support this thesis, when I began researching applications that could potentially be used by fraudsters to create deepfake videos, the focus shifted immediately to the Wav2Lip model, mainly due to its blurriness, use of lip-sync techniques, and, of course, being open-source and free.

Wav2Lip is a free, open-source deep learning model that can lip-sync videos to any audio track with high accuracy. It works for any language, voice, or identity, including synthetic voices and CGI faces.

When I experimented with the Wav2Lip_simplified_v5.ipynb Jupyter notebook tool on one of the videos, targeted by fraudsters, the similarities with the deepfake video (the problem of lip movements not always being synchronized with the generated audio from the text (audio deepfake)) reinforced the possibility that fraudsters were utilizing this model.

Conclusion

The groundbreaking developments in artificial intelligence continue to grease the wheels for scammers, making their jobs easier. For instance, by simply paying a monthly fee of $5 and uploading a video or audio file of the person you want to mimic to the ElevenLabs web application, you can use artificial intelligence to have any text you write voiced by that person. With this situation in mind, such services always have the potential to be abused by malicious individuals.

In the face of increasing deepfake videos on social media and networks, let’s be very, very cautious, and similarly, let’s not forget the possibility of our voices being copied (audio deepfake) and being used against our loved ones by fraudsters. It might be beneficial to already establish a keyword to be used for verification purposes in emergencies with your loved ones against the possibility of your voice being copied.

In today’s world, where we can’t believe what we hear (audio deepfake), what we see (deepfake video), or what we read (misinformation, disinformation, deepfake text), let’s not forget the age-old advice: “Don’t believe anything you haven’t seen with your own eyes.”

Hope to see you in the following articles.