



## Major VisionLabs projects



# About VisionLabs

## General information

VisionLabs is an international company and a recognized international **leader** in the field of computer vision.

Since 2012 the company specializes in creating software products for recognizing faces, bodies, vehicles, gestures, abnormal behavior and other objects.

Our Artificial Intelligence and Machine Learning technology, built on neural network-based algorithms makes the world safer, more secure and helps everyday citizens in more than 60 countries realize the ease and convenience of navigating a world that has permanently shifted to digital. Our mission is to use facial recognition to facilitate better, safer interactions for the modern world.

## Team

- ✓ 250+ employees on staff, of which:
- ✓ **more than 50%**—developers and researchers
- ✓ **more than 15%**—implementation engineers and technical support staff who support pre-sales, post-sales and provide operational support for users

## Certification and partners



fido™



iBeta

## Nominations

2021  
ICCV  
CVPR

NIST

## VisionLabs in 2026

**№ 1**

in international rankings in the field of computer vision and object recognition – NIST, CVPR and ICCV

**500+**

clients from various sectors: government, transport, finance, telecommunications, retail, healthcare

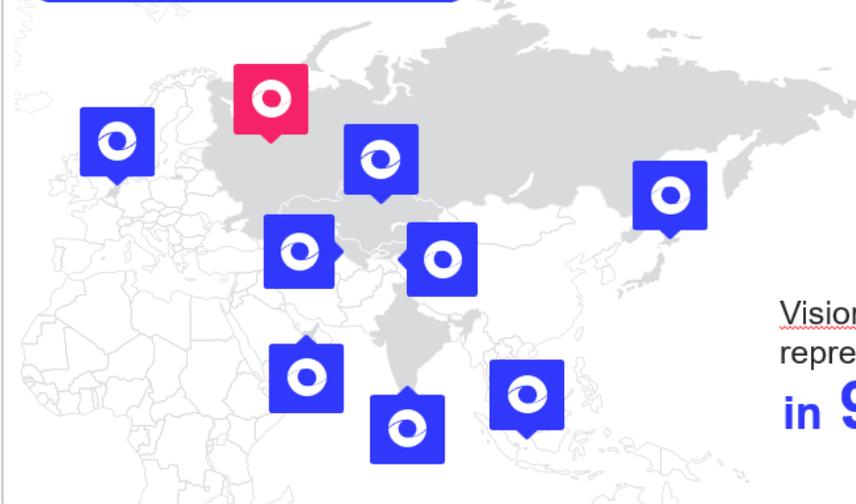
**↑1,7 mln**

cameras worldwide connected to VisionLabs software

**↑1,5 bln**

events are processed in real time by VisionLabs software every month

## VisionLabs geography



VisionLabs has representative offices **in 9 countries**

# VisionLabs technologies for facial recognition



## Face recognition

Face detection and authentication



## Attribute recognition

Recognition of gender, age, emotions, masks



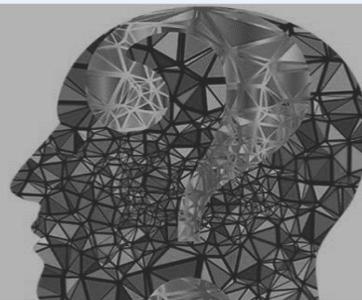
## Liveness check

Detection of attacks on biometric presentation



## Photo quality check

Verification of compliance with ISO/IEC 19794-5 standard



## Definition of psychotype

Drawing up a psychological portrait based on emotions, gestures, etc.



## DeepFake check

Detection of identity substitution implemented by DeepFake technology

# VisionLabs technologies for object and event recognition



## Identifying dangerous situations by posture

Identification of dangerous situations by posture (fall, shooting position, raised arms, etc.)



## Intelligent search

Tracking objects across a network of cameras and searching through event archives



## Recognition silhouettes

Body position recognition, movement tracking



## PPE recognition

Personal Protective Equipment Recognition



## Fire recognition

Detection of fires in the early stages



## Vehicle recognition

Recognition of makes, models, license plates and other attributes of vehicles



## Fight recognition

Detection of fighting postures: raised arms and legs, supine body position



## Recognition of weapons and abandoned objects

Weapon detection and detection of unattended objects

# Technologies for solving various problems using CV



## Monitoring of the driver's condition

Monitoring driver condition to prevent accidents



## Product quality control

Detection of rejects and defects in production



## Medical scans analysing

Detection of organ abnormalities on medical images (CT, MRI, ultrasound, etc.)



## Gestures recognition

Recognizing static and dynamic gestures



## Road events recognition

Recognizing vehicles, people, animals, birds, smoke, fire, etc. on the road surface



## Sporting events recognition

Detecting and recognizing sporting events in football and hockey

# VisionLabs in international rankings: verification

2025-07-18

**all 3 prizes**  
in **4/6** categories

algorithms (including previous versions) are taking over, surpassing the latest technologies from vendors around the world for the first time in NIST's history

**TOP-1**  
based on NIST  
testing results

in the verification track - comparing two samples to determine whether they belong to the same person (FRTE 1:1 Verification)

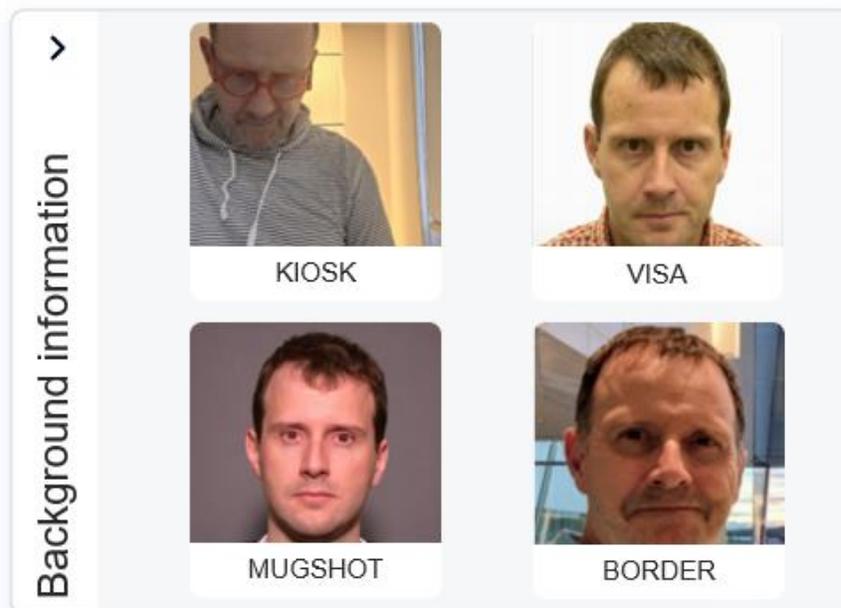
**0,001%**  
type II errors

with 0.2% type I errors in the MUGSHOT – MUGSHOT category

## NIST FRTE 1:1 Verification Leaderboard results by category

	MUGSHOT – MUGSHOT	VISA – BORDER	BORDER – BORDER	BORDER – KIOSK	VISA – BORDER Yaw≥45°	MUGSHOT – MUGSHOT ΔT≥12 YRS
🥇 place	<a href="#">VisionLabs<sup>1</sup></a>	<a href="#">VisionLabs<sup>2</sup></a>	<a href="#">VisionLabs<sup>2</sup></a>	<a href="#">VisionLabs<sup>2</sup></a>	<a href="#">Paravision</a>	<a href="#">Cloudwalk-mt</a>
🥈 place	<a href="#">VisionLabs<sup>1</sup></a>	<a href="#">VisionLabs<sup>1</sup></a>	<a href="#">VisionLabs<sup>1</sup></a>	<a href="#">VisionLabs<sup>1</sup></a>	<a href="#">Viante</a>	<a href="#">Cloudwalk-mt</a>
🥉 place	<a href="#">VisionLabs<sup>2</sup></a>	<a href="#">VisionLabs<sup>1</sup></a>	<a href="#">VisionLabs<sup>1</sup></a>	<a href="#">VisionLabs<sup>1</sup></a>	<a href="#">VisionLabs<sup>2</sup></a>	<a href="#">Paravision</a>
4 place	<a href="#">Paravision</a>	<a href="#">Viante</a>	<a href="#">Viante</a>	<a href="#">Viante</a>	<a href="#">Cloudwalk-mt</a>	<a href="#">Innovatrics</a>
5 place	<a href="#">VisionLabs<sup>1</sup></a>	<a href="#">VisionLabs<sup>1</sup></a>	<a href="#">VisionLabs<sup>1</sup></a>	<a href="#">VisionLabs<sup>1</sup></a>	<a href="#">Cloudwalk-mt</a>	<a href="#">SenseTime</a>
6 place	<a href="#">Psi</a>	<a href="#">Recognito</a>	<a href="#">Viante</a>	<a href="#">Innovatrics</a>	<a href="#">Paravision</a>	<a href="#">Idemia</a>
7 place	<a href="#">VisionLabs<sup>1</sup></a>	<a href="#">Viante</a>	<a href="#">Roc</a>	<a href="#">Viante</a>	<a href="#">Toshiba</a>	<a href="#">VisionLabs<sup>1</sup></a>
8 place	<a href="#">Innovatrics</a>	<a href="#">Cloudwalk-mt</a>	<a href="#">Cloudwalk-mt</a>	<a href="#">Stcon</a>	<a href="#">Paravision</a>	<a href="#">VisionLabs<sup>1</sup></a>
9 place	<a href="#">Incode</a>	<a href="#">Paravision</a>	<a href="#">Cloudwalk-mt</a>	<a href="#">Stcon</a>	<a href="#">VisionLabs<sup>1</sup></a>	<a href="#">VisionLabs<sup>2</sup></a>
10 place	<a href="#">SenseTime</a>	<a href="#">Cloudwalk-mt</a>	<a href="#">Viante</a>	<a href="#">Paravision</a>	<a href="#">Paravision</a>	<a href="#">Paravision</a>

## Examples of images



# VisionLabs in international rankings: identification

2024-12-18

**leadership**

in **6 / 8** categories

among more than 500 submitted algorithms from vendors around the world

**TOP-1**

based on NIST testing results

in the identification track - searching for a specific person from a multiple sample database (FRTE 1:N Identification)

in **2** tracks

of identification testing VisionLabs is the leader

## NIST FRTE 1:N Identification Leaderboard results by category

		MUGSHOT – MUGSHOT N=12000000	MUGSHOT – MUGSHOT N=16000000	MUGSHOT – WEBCAM	MUGSHOT – PROFILE 90°	VISA – BORDER	VISA – KIOSK	BORDER – BORDER ΔT≥10 YRS	MUGSHOT – MUGSHOT ΔT≥12 YRS
<b>Identification<sup>2</sup></b> by developer	1 <sup>st</sup> place	VisionLabs <sup>1</sup>	VisionLabs <sup>1</sup>	VisionLabs <sup>1</sup>	VisionLabs <sup>1</sup>	VisionLabs <sup>1</sup>	VisionLabs <sup>1</sup>	NEC	NEC
	2 <sup>nd</sup> place	NEC	Sensetime	NEC	Cloudwalk-mt	Cloudwalk-mt	NEC	Cloudwalk-mt	Cloudwalk-mt
	3 <sup>rd</sup> place	Idemia	Idemia	Sensetime	NEC	NEC	Cloudwalk-mt	Megvii	VisionLabs <sup>1</sup>
<b>Investigation<sup>3</sup></b> by developer	1 <sup>st</sup> place	VisionLabs <sup>1</sup>	VisionLabs <sup>1</sup>	VisionLabs <sup>1</sup>	VisionLabs <sup>1</sup>	VisionLabs <sup>1</sup>	VisionLabs <sup>1</sup>	NEC	NEC
	2 <sup>nd</sup> place	Sensetime	Psi	Psi	Sensetime	Cloudwalk-mt	Cloudwalk-mt	VisionLabs <sup>1</sup>	VisionLabs <sup>1</sup>
	3 <sup>rd</sup> place	Idemia	Sensetime	Sensetime	NEC	Stcon	Stcon	Cloudwalk-mt	Idemia

## Examples of images

Background information >



WEBCAM



PROFILE 90°

<sup>1</sup> The current version of the neural network for recognition, designated in the report as qazsmartvisionai-002 <sup>2</sup> One-to-many comparison (e.g., checking if this person is present in the security database) <sup>3</sup> Search for a specific person in the database (e.g., identification of a suspect from a crime scene photo).

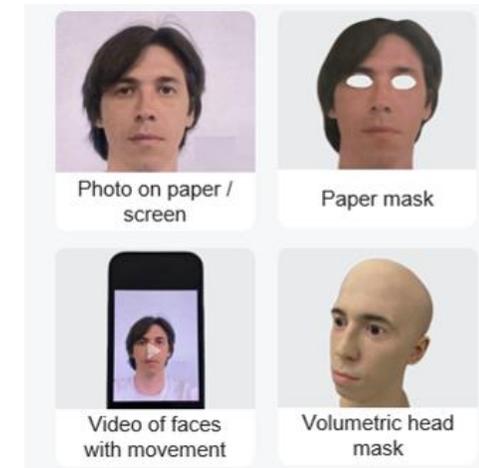
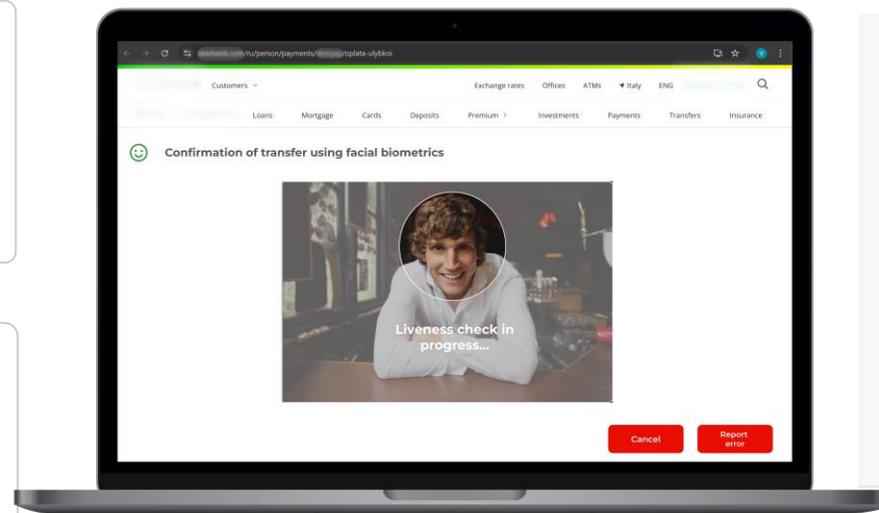
# Module for checking videos from web cameras for Liveness & Deepfake

## LUNA PASS

The service is designed to check the probability of an attack on a biometric system using a web browser based on video stream frames, mainly from the device's webcam. Selecting the best frame and sending the image to external services..

## Key features

-  Face detection with an accuracy of 99% or more<sup>1</sup>
-  Detection of an attack on a biometric system. Allows to detect and distinguish a live person from a mask or video stream spoofing (Liveness, DeepFake)
-  Extraction and verification of facial attributes (presence of glasses, eye/mouth condition, head tilt and rotation angles)
-  Evaluating the quality of the incoming image and selecting the best frame
-  Capture video stream from a webcam or mobile device camera
-  Viewing processing results via the web interface
-  Possibility of logging the checks performed



## Supported platforms



## Supported browsers



## Main project experience

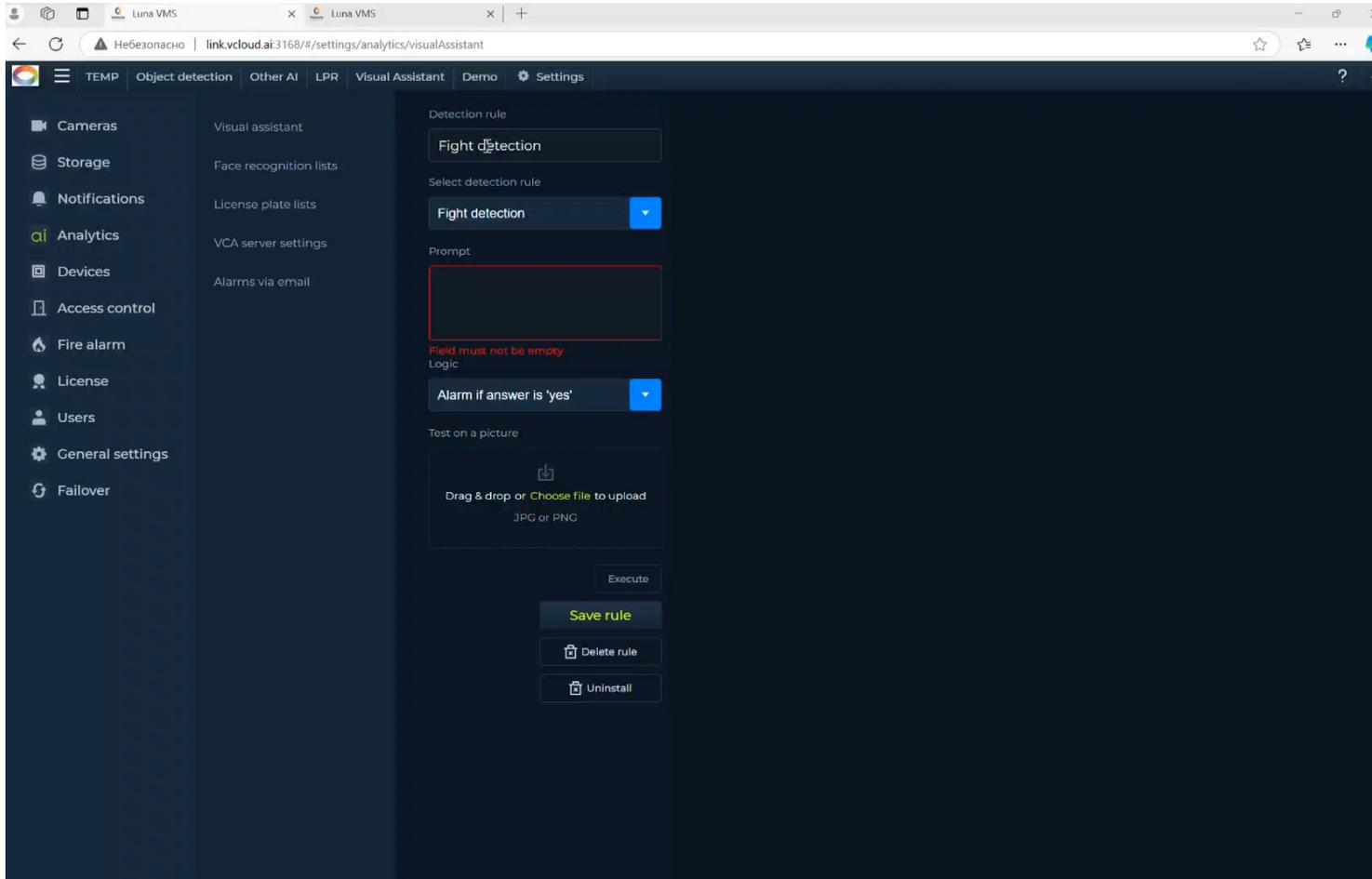


# GUESS WHICH ONE IS A DEEPPFAKE?





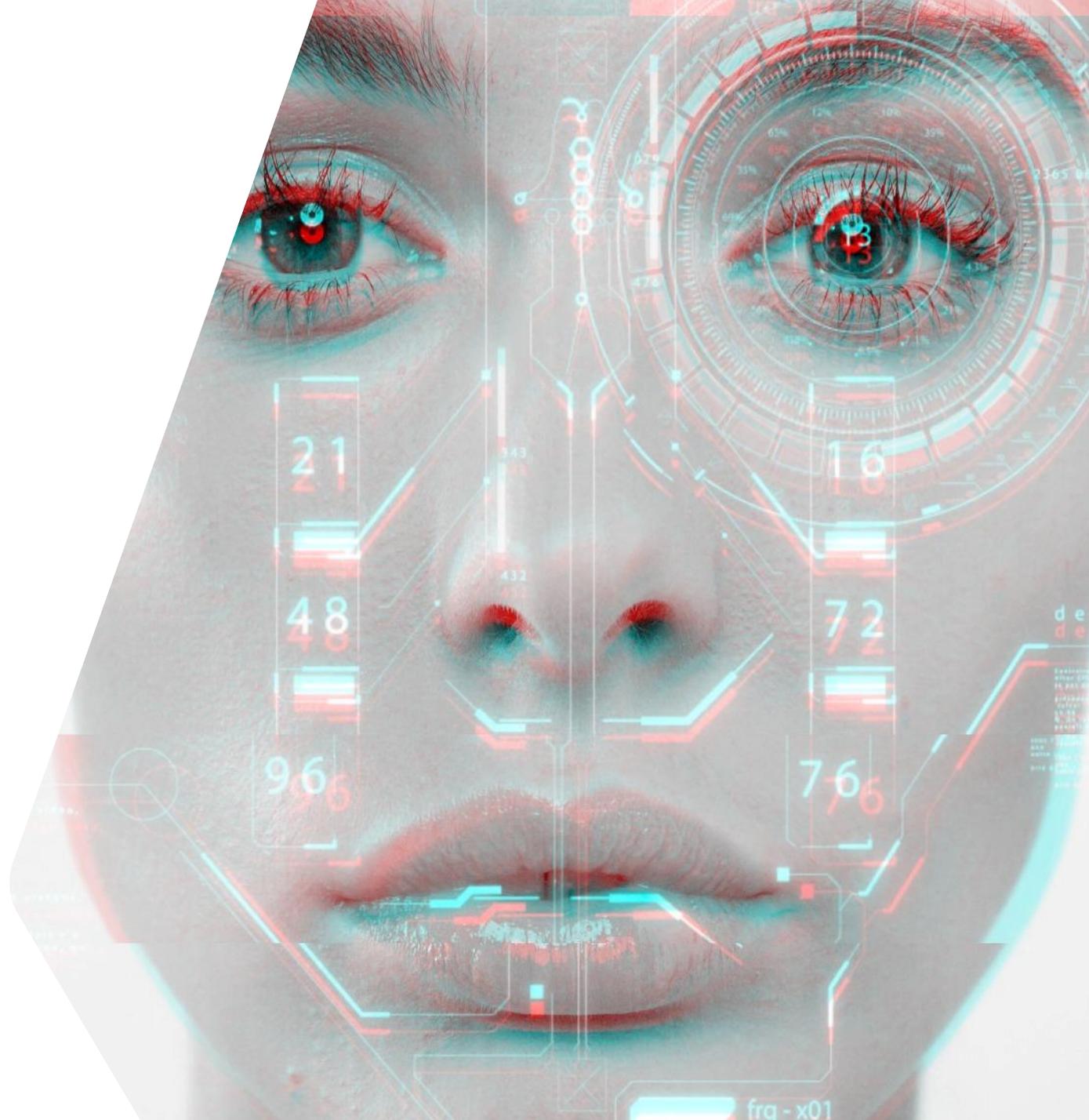
# CREATE YOUR OWN VIDEO ANALYTICS IN 20 SECONDS



- Create custom video analytics detectors in 20 seconds with Visual Assistant technology.
- Simply provide instructions in natural language.
- Receive alerts or enable the system to count objects specific to your needs.
- Test your detector in the integrated editor. Use your custom detector with any camera.



# VisionLabs projects



# Biometric access control

## General Description

Implementation of a fast and contactless method of authentication of employees, visitors and other categories of people "by face", access to a safe deposit box, value vaults, cash desk and opening turnstiles based on the results of facial recognition when entering the financial building.

## Tasks to be solved

-  Realisation of "barrier-free environment" by means of contactless authentication of persons when passing through the turnstile
-  Protection against unauthorised access attempts with Liveness technology
-  Search of persons by checklists, generation and sending of notifications about attempts of unauthorised persons' passage
-  Fixing and recording the time of arrival and departure of employees, generation of reports
-  Integration of facility ACS into a single complex with biometric badging

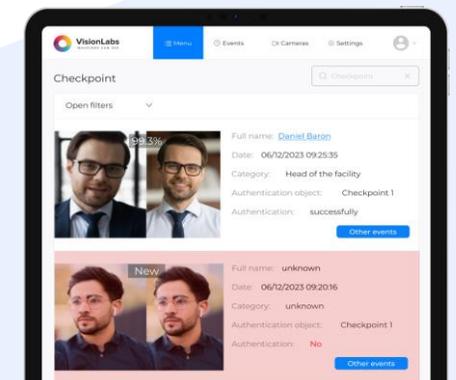
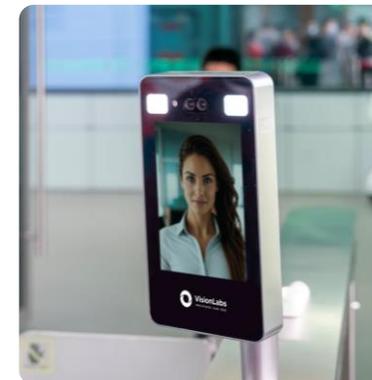
FIFA WORLD CUP  
Qatar 2022



-  Using VisionLabs engine in Qatar stadiums for access to VIP zone by biometrics



-  Using VisionLabs technologies, employee access control has been implemented at the Dubai Ministry of Interior
-  400 biometric access terminals installed



# Biometric access control



ROYAL CARIBBEAN CRUISES LTD.



Implementation of an access control system at self-check-in kiosks when boarding Royal Caribbean ships. In commercial operation since 2019.

To take advantage of Royal Caribbean's new face recognition-enabled expedited check-in process, passengers can check in at home and then quickly check-in and board when they arrive at the terminal.

2  
times

ACS capacity increased

> 20%

reducing the cost of maintaining security staff

by  
15%

the number of late arrivals and early departures from the workplace has been reduced

by  
15%

the number of queues has been reduced due to self-registration



- More than 3,000 points are equipped with VisionLabs technologies in Japan
- More than 500 thousand persons in the database
- Access control, time and attendance tracking



NVIDIA



- Over 40 entry/exit groups at Endeavor HQ
- More than 20 thousand faces in the Nvidia database

Suprema



- Implementation of face recognition technologies to implement the Biometric ACS scenario

MANTRA  
Innovation that counts



- Implementation of VL face recognition technologies in the Mantra terminal to implement the ACS scenario
- The terminal is equipped with an 8-inch display, a dual-lens camera and an infrared camera

# Biometric access control



Biometric access control has been implemented at the headquarters of the VK company in Moscow. The solution provides a contactless way to pass through the turnstile “by face”. Employees just need to look into the camera – the recognition process takes a split second.

The access control system implemented by Visionlabs is more user-friendly - employees no longer need to carry a physical pass with them at all times.

**>30** biometric terminals installed at headquarters

**< 1 sec** is required for an employee to pass through the turnstile “by face”

**up to 180** biometric terminals, the access control system will be expanded

**> 8 thousand** company employees use a face recognition system



**More than 100 thousand** employees use access control systems in the companies of the Sistema Group

**Less than 1 second** turnstile response time to allow an employee to pass through the checkpoint



**At the Syzran Refinery, 16 checkpoints** are equipped with biometric access control systems

**More than 15 biometric face recognition terminals** are installed at checkpoints

**About 2,000 passes** are issued daily on site



**In order to improve security, MMK implemented a project to introduce biometric access control**

**More than 18 thousand employees** work at the facilities of MMK and use the access control system



**Biometric access control has been implemented at 3 hospital entrances**

**More than 3,000 employees** perform facial passes

**4 turnstiles** are equipped with biometric access equipment

# Biometric access control in banking

**MTS BANK**



Visionlabs, together with partner Sitronics Group, implemented biometric access control at the head office of MTS Bank in Moscow. The solution provides a contactless way to pass through the turnstile “by face”. Employees just need to look into the camera – the recognition process takes a split second. The access control system implemented by Visionlabs is more user-friendly - employees no longer need to carry a physical pass with them at all times.

52

terminal was installed for access control in the office

< 1  
sec

required for an employee to pass through the turnstile “by face”

9

floors in the building, each of which has up to 4 turnstiles with an access control system

> 4  
thousand

employees visit the office daily



**SBER**



- 1 More than 200 cameras have been launched in Sber branches for operation
- 1 3 thousand biometric access terminals are used for access control

**VTB**



- 1 26 access points installed at the head office of the VTB office
- 1 13 turnstiles are equipped with face terminals
- 1 Less than 1 second is required for the turnstile to operate “by face”

**Bank of Russia**



- 1 2 terminals installed in the Central Bank building
- 1 More than 10 thousand faces in the object's database
- 1 The project was implemented in cooperation with PJSC Rostelecom

**DOM** | **БАНК**



- 1 12 cameras are used at one site to authenticate visitors
- 1 6 turnstile groups are equipped with biometric identification
- 1 More than 7 thousand people work in the DOM.RF group of companies

# Biometric access control in educational institutions



With the development of technology, the task is to strengthen the access control and monitoring system of educational institutions. Visionlabs technologies allow to solve several problems at once:

- biometric access control system for controlling access to the territory using a person's biometric data;
- non-contact thermometry for automatic identification of persons with elevated temperature;
- intelligent video analytics to identify suspicious behavior and dangerous situations;
- payment by face in canteens, buffets and vending machines to prevent theft of funds.

- > 50** buildings are equipped with biometric systems
- 2 months** on average required to implement the system at one facility
- > 100** turnstiles equipped with biometric access control system over the last year
- with > 4** ACS integration completed: PERCO-WEB, Sigur, Bolid, Parsec



- 1 2 smart turnstiles installed in the new school building
- 1 63 cameras installed inside the new housing
- 1 More than 600 passes are carried out daily through biometric access control system



- 1 26 schools are equipped with a biometric authentication system
- 1 It took 3 months to implement the biometric access control system
- 1 More than 500 students and employees use biometric access control on a daily basis



- 1 6 dormitory buildings are equipped with a biometric identification system
- 1 It took 1 month to implement biometric access control system
- 1 More than 5 thousand students study at the University



- 1 129 cameras connected to biometric access control system
- 1 A new access system is being implemented at 50 sites
- 1 100 thousand persons in the Customer database
- 1 More than 36 thousand students study at Kazan University

# Safe City

## Singapore



The face recognition system is part of a development program called “Smart Nation”, the development of which began in 2014. The system works in conjunction with the SingPass Mobile app, which allows people to register their own fingerprints and faces in the government's biometric database. SingPass brings together more than 500 digital services from 180 government agencies and businesses. The application is used by 3.5 million people, of which 85% use it regularly.



> 87  
thousand

transactions carried out on the SingPass app in the last year

> 90  
thousand

cameras are used in Singapore for face recognition

## Argentina



In Argentina, the implementation of a unified biometric system has begun for use in the public and private sectors - gaining access to city services, interaction with financial service providers.

- 20 million individuals - base limit in accordance with the annual license issued by VisionLabs to use the company's technology in Argentina
- Buenos Aires is among the top 35 safest cities in the world, including the capital of Argentina

## South Korea



- 3 million persons is the volume of the database for which the VisionLabs license is issued
- 220 thousand street video surveillance cameras will be connected in the next 3 years as part of the project

## Brazil



- A pilot test of the “Safe City” hardware and software complex was conducted in the administrative center of the state of Santa Catarina, the city of Florianópolis.
- 100 street surveillance cameras with 4K resolution were connected at the first stage of the project

# Border control

## General description

VisionLabs, a global leader in facial recognition and computer vision technologies, has deployed its biometric solution at the border control inside a major Saudi airport. The overall project is supervised and coordinated by the National Information Center (NIC).

VisionLabs provides the facial recognition engine used to automate identity verification at the border control within the airport. The system enhances security screening, accelerates passenger processing, and improves operational efficiency for airport border-control staff. The deployment is fully compliant with Saudi security requirements and integrates seamlessly with airport infrastructure and government systems under the oversight of NIC.

## Saudi Arabia



### Key Capabilities

- Fast and precise identity confirmation during passenger entry or exit
- Immediate checks against watchlists to support airport security procedures
- High-speed passenger flow handling designed for continuous operation even during peak hours
- Stable performance with controlled lighting and fixed camera positions



100 million persons - base restriction in Saudi Arabia under the annual licence

# Safe City



## VL & In Meeting partner Project

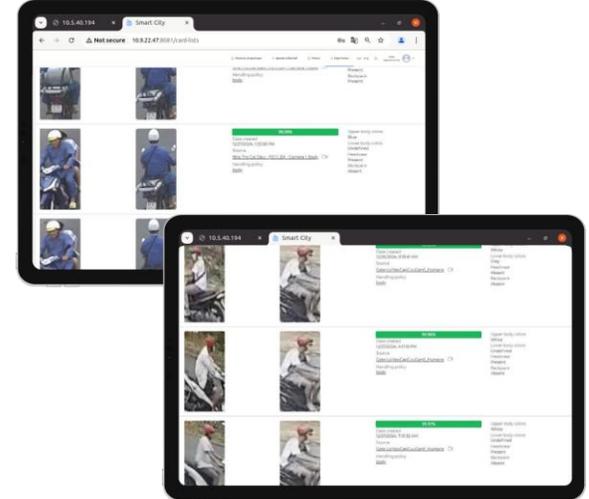
The first stage of the Safe City project with VisionLabs for face recognition and tracking of violators has been implemented in Hanoi.

**6 months** it took a while to implement the system and test the algorithm.

**up to 4 thousand** cameras will be expanded to fully cover Hanoi

**>250** cameras are already connected to the system

**up to 20 thousand** the project will be scaled in 5 cities of Vietnam



## Africa



Together with Travizory, smart arches with facial recognition are being implemented in Kenya and the Seychelles for automated customs clearance. It is planned to equip 5 airports.

- It took 5 months to implement the system
- 2 airports in Africa are equipped with smart arches for customs clearance
- More than 30 smart arches have been installed at airports as part of Project
- 5 airports in Africa plan to implement automated customs clearance in 2025



In Thailand, VisionLabs face recognition system for law enforcement agencies is being implemented jointly with Sanden Corporation. Integration with databases to search for criminals is planned.

- More than 30 million persons in the database of the Investigative Committee of Thailand

# Safe City

## Baku



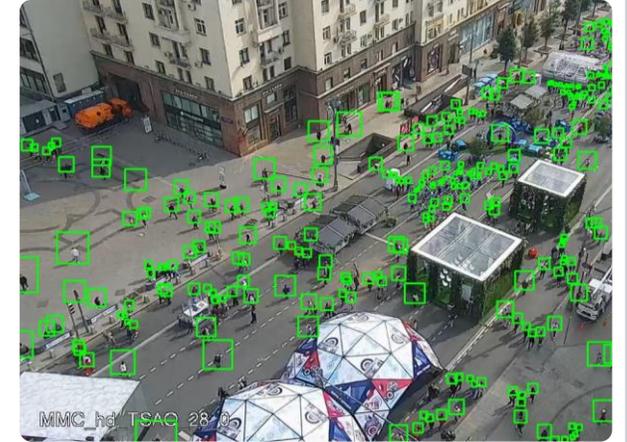
The Unified Information System for Monitoring People and Vehicles using VisionLabs technologies was implemented in the territory of Baku city in the Republic of Azerbaijan. The system provides the functions of recognising faces and silhouettes of people detected on the city surveillance cameras. The project on modernisation of the facial recognition system for the Ministry of Internal Affairs of Azerbaijan envisages an increase in the speed of searching for suspicious persons using video surveillance cameras.

**> 950** cameras are connected to the Safe City system

**10** blacklists are searched to identify a suspicious person.

**> 7 mln** of individuals included in the search database

**3 mths** it took to implement the facial recognition system



## Serbia



A project to create a Safe City system for recognising and searching for faces on city segment cameras in cooperation with the Serbian Ministry of Internal Affairs. The project implemented an intelligent video analytics system based on data from street surveillance cameras.

- More than 200 cameras are connected to the system
- Up to 1 million individuals are contained in search databases
- It took 3 months to implement the recognition system

## Argentina



In Argentina, the implementation of the EBS has been initiated for use in the public and private sectors - access to urban services, interaction with financial service providers.

- 20 million individuals is the base limit under the annual licence granted to VisionLabs to use the company's technology in Argentina
- Buenos Aires is among the top 35 safe cities in the world is Argentina's capital city

# Remote processing of services

## Description

Remote biometric verification and identification of customers in a mobile application or other remote channels.

Biometric access to remote services allows to confirm financially significant transactions and registration of new services without a personal visit to the organization's office.

Service can be integrated with loyalty systems and existing infrastructure.



Provision of financial online services using facial biometric authentication



Confirmation of financially significant transactions by facial authentication



Detecting customer identity spoofing during service provisioning using Liveness technology



Remote customer verification in Emirates NBD, the largest bank in the UAE, is implemented based on a comprehensive technical solution from VisionLabs.

To open an account, a user just needs to scan his passport or ID card in the bank's mobile application and the system will automatically fill in all the necessary data in the application.

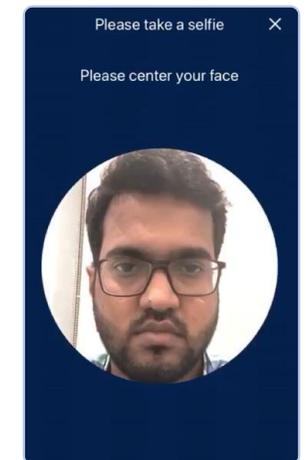
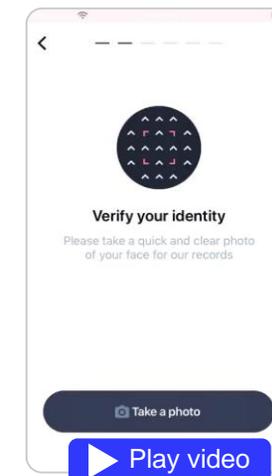
To confirm your identity in the mobile app, you need to take selfies: the face in the frame is recognised and compared to the photo on the document.

> 3 mln

customers have been registered in the bank's biometric system since the system was put into operation

< 20 sec

necessary to create a biometric profile in the system, including verification of identity documents



# Bank's biometric platform

**ABA BANK**  
NATIONAL BANK OF CANADA GROUP



Implementation of a KYC scenario based on VL recognition systems at ABA Bank (the banking part of the National Bank of Canada)

- More than 2 million clients are registered in the bank's biometric system
- More than 100 thousand transactions to confirm instant P2P transfers daily
- 0 cases of challenging P2P transactions confirmed by biometric data

**EQUIFAX**



A face recognition system is being launched at the interbank level. This system is used as part of the anti-credit fraud service. More than 20 largest banks are connected to it.

- Customer credit rating based on biometrics - 62 retail banks
- More than 50 million faces in the database
- Over \$100 million in loss prevention per year

**EGOV**



A Unified Identification System, OneID, has been created on the basis of the Center for Electronic Government of Uzbekistan, which will allow citizens to receive government and commercial services using biometrics, for example, issuing certificates confirming operations using biometric technologies.

- The population of Uzbekistan is more than 36 million people (potential users of the biometric system)
- More than 200 thousand transactions are made monthly
- It takes 3 seconds to recognize the user's face



THE MINISTRY OF TRANSPORT,  
COMMUNICATIONS AND HIGH TECHNOLOGIES  
OF THE REPUBLIC OF AZERBAIJAN



- Creation of a unified biometric system to provide biometric identification services to organizations and public service centers
- More than 200 thousand biometric templates have been collected in the database of telecom operators
- More than 100 thousand clients are using the application

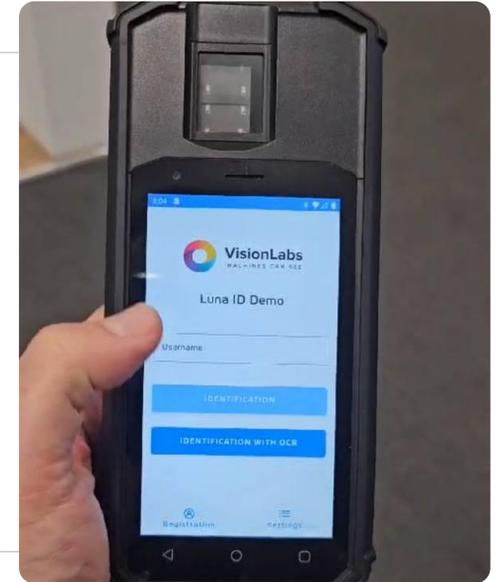
# Remote identity verification



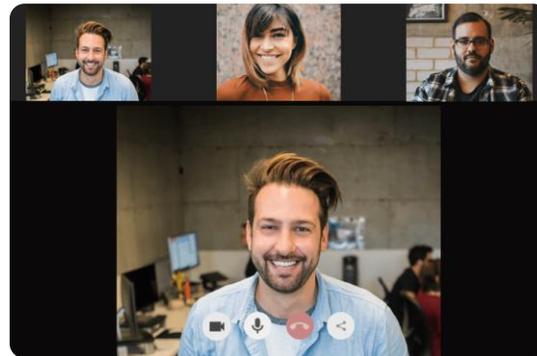
As part of a joint project with Axon Wireless in Africa (in the Democratic Republic of the Congo and Angola), a biometric data processing system for mobile applications and terminals is being implemented. The creation of an integrated access system will ensure a high degree of security and convenience for users. Using the VisionLabs facial recognition system integrated into the Axon Wireless application, customers will be able to access the mobile application and receive services at branches using a simple and fast identification procedure.

**10 thousand** faces make up the current database of the recognition system

**up to 50 thousand** faces will be added to the database



- 1 The WebMoney Transfer international system has added identity identification functionality to WebMoney Video group video calling service.



- 1 In Uzbekistan, banks are actively implementing remote identification technology based on VisionLabs facial recognition technology.
- 1 The biometric system allows for customer verification using biometric data in the bank's mobile application, minimizing fraud risks and speeding up the process of obtaining services remotely.
- 1 More than 1.5 million clients of the Microcredit Bank and the National Bank of the Republic of Uzbekistan, respectively, are potential users of the service

# VisionLabs experience: FacePay 1|2



Together with the Ministry of Transport of the Republic of Uzbekistan and VisionLabs, a pilot project was successfully implemented to introduce in-person payment in the Tashkent metro at the Buyuk Ipak Yuli metro station. To use the service, you need to register in the mobile application, link a photo of your face and a bank card with funds to pay for travel. The system allows contactless payment for travel using biometric facial data.

**in 2** metro vestibules pilot operation completed

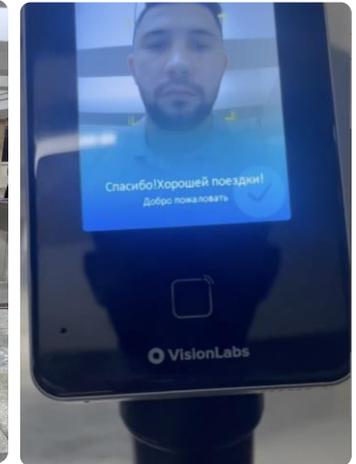
**> 72 thousand** payments for biometrics have been made since the launch of the project at metro stations

**3 month** required to implement the pilot project

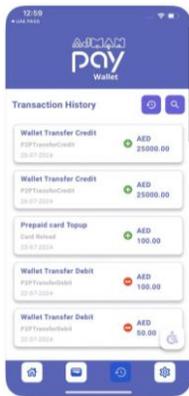
**> 47 thousand** persons were added to the biometric database as a result of the project implementation



[▶ Play video](#)



Implementation and testing of payment terminals based on facial recognition on an intelligent digital payment platform AJMAN Pay.



In Oman, VisionLabs has teamed up with Thawani Technologies to launch face payment. The payment system has been implemented in a chain of coffee shops.



[▶ Play video](#)



The Makro retail chain is introducing a biometric loyalty system with facial recognition from VisionLabs and Smart Telecom Solutions.

**3 stores** have implemented the biometric payment system "FacePay"

**More than 20 thousand customers** will be registered through the mobile application



FacePay has been implemented in the Almaty metro based on VisionLabs facial recognition technology.

**100% of metro stations** are equipped with FacePay system

**2 months** were required to implement FacePay system

**Less than 2 seconds** are required to pay for travel

# VisionLabs experience: FacePay



The Pyaterochka and Perekrestok stores have implemented an innovative method of completely contactless and secure payment for goods and services using biometrics, “Payment with a Smile,” which provides:

- speeding up the payment process at the self-service checkout;
- improving the customer experience.

**3 sec** takes to pay “by face” instead of 34 seconds for cash and 15 seconds for non-cash payments

**> 15 thousand** self-checkouts support face payment in over 5,000 stores

**~0.05 %** is the savings on MIR Pay commission and others from each transaction

**> 3 thousand** transactions per day are carried out per person daily with an average check of more than 500 rubles

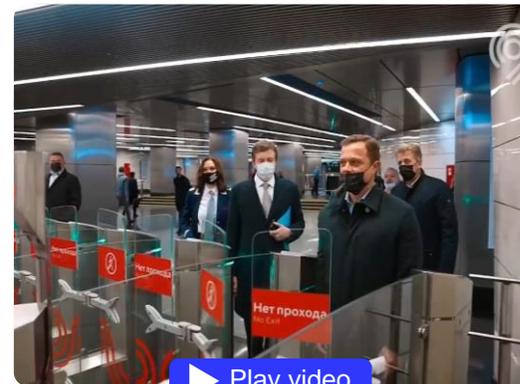


In October 2021, the Face Pay service was launched at all Moscow Metro stations, which allows contactless payment for travel using biometric facial data. To use the service, you need to register in the Moscow Metro mobile app, link a photo of your face, Troika, and a bank card with funds to pay for travel.

Liveness check has been implemented when passing through the turnstile at Moscow metro stations when paying with FacePay.

**125 million** Moscow metro passengers made passes using FacePay

**100%** Moscow metro and MCC stations are equipped with cameras with facial recognition modules



## Ski resort



Implementation of the world's first project for access to the ski resort and payment for ski pass "by face"

2 turnstiles are already equipped with face-passing technology

More than 60% of visitors use face-passing technology in the current season

# Intelligent video surveillance system

WILDBERRIES



Implementation of a system for automated collection and analysis of information in real time, obtained from CCTV cameras of the sorting center and the Wildberries warehouse unit, using built-in VisionLabs video analytics.

The implementation of the system helps to monitor prohibited areas and identify unauthorized access to the territory of the sorting center and storage unit.

20

cameras are located on the territory of the sorting center

> 36  
thousand

is the number of Wildberries employees and potential users

> 1000

warehouse employees are system users

> 1  
thousand

sorting centers are located in Russia



M T S



80% reduction in labor intensity for registering employees, clients and visitors, controlling the "unwanted list" and monitoring the territory

More than 16 thousand people are employees of the MTS office, where a video surveillance system has been implemented

ATOMDATA



Implementation of an intelligent video surveillance system to protect the perimeter on the territory of AtomData

Implemented 5 analytics to monitor the perimeter, visitors and employees



INTERNATIONAL SCHOOL OF KAZAN



2 school buildings are equipped with an intelligent video surveillance system

The following video analytics have been implemented: recognition of suspicious behavior, the presence of fires, smoke and other alarms



FARG'ONA

NEFTNI QATRA QILASH ZAVODI



Implementation of a video analytics system in the workshops and fuel production of the Fergana Oil Refinery

More than 9 analytics are used at refinery facilities

# Intelligent video surveillance system



In the Makarovskiy residential area, a safe quarter project was implemented through the implementation of the VisionLabs LUNA VMS product. The solution is used to ensure the security of a residential complex. The system ensures the collection and processing of video streams in real time, displaying images on monitors, and also provides ultra-precise neural network algorithms and advanced video analytics to ensure security in residential complexes.



**350** installed on site for project implementation

**170 thousand m<sup>2</sup>** is the total area of the block covered by cameras

**> 8** LUNA VMS Product Analyst Used in Safe Quarter

**> 900** apartments were built on the territory and are protected using a video surveillance system



There are **30** cameras connected throughout the facility to ensure security.

The total area of the area is **9 million m<sup>2</sup>** covered with cameras



The project to ensure security at Kazakhmys production sites allows to protect the production perimeter

More than **8** video analysts are used at the facility to monitor the perimeter



**50** thousand cameras transmitted analytics data in real time to Regional Operational Headquarters

**62** people who were wanted were detained



Cases of people entering closed areas of the airport have been reduced by **2** times

More than **2,000** attempts to enter prohibited areas have been stopped since implementation

# Registration using biometrics at self-service kiosks



A project to add face recognition functionality to self-registration kiosks at the Moscow Arbitration Court. The user must register at the kiosk and go through an authentication process to be approved for further services. Authentication takes place in 3 stages: extracting a biometric template from a photo of a Russian citizen's passport; extracting a biometric template from a photo; comparison of 2 biometric templates for the fact of belonging to the same person.

30

self-registration kiosks with VisionLabs technologies installed in court

6 months

required for project implementation

3 sec

takes user face recognition

2 times

the speed of service for visitors to the Arbitration Court has increased



Moscow International Cancer Center



A system of electronic queuing, navigation and interaction with visitors has been introduced, which allows to authenticate visitors and employees using biometric data of individuals, as well as navigate through the territory of the facility.

More than 100 thousand patients used the solution in a year

4 terminals are installed in the reception area

15 cameras installed on the territory of the Oncology Center

Queues at the registration desk have been reduced by 36%



A project to implement a solution for logging into a personal account through a self-service kiosk installed on the territory of the Kronstadt enterprise using facial biometrics of employees.

5 self-service kiosks were installed on the territory of the Kronstadt plant

More than 1,000 employees use the technology for logging into their personal accounts "by face"

It took 3 months to implement the system

# Driver condition monitoring

Yandex Taxi



A project to monitor the condition and re-authenticate the driver and passengers for the preventive prevention of accidents, property damage and other incidents during the transportation of mined and processed copper. The project was implemented using VisionLabs technologies.

by **25%** the number of traffic accidents has decreased

**2** times the number of overtime hours worked by drivers has decreased

**> 100** cases of non-compliance with transportation rules were recorded during functionality testing

 driving safety increased



CITYMOBIL



Visionlabs, together with Citymobil, has implemented a fatigue monitoring system for taxi drivers. There are two cameras installed in the car interiors that monitor the driver and the road. The computer vision-based system monitors fatigue levels, phone calls, distracted driving and seat belt use, and it also analyzes driving habits. After the system detects a violation, it emits a sound signal.

**15** cars are participating in the pilot

**2** cameras installed in each car

The system analyzes the driver using **5** parameters

 RIMAC  
AUTOMOBILI



**2** million euros is the cost of a Rimac car using face recognition

**150** pieces – limited edition cars

**1** thousand people work on creating cars

# Vehicle recognition

## Hong Kong



Implementation of a vehicle recognition and vehicle license plate recognition solution at all Shell gas station parking lots in the city and paid parking at Hong Kong International Airport. Automatic payment for parking through parking software after recognizing the client's car license plate number.

Main features: recognition of more than 800 vehicle models, vehicle attributes, reduction of checkpoint passage time, vehicle access control, integration with an existing video surveillance system.

> 10

refueling cameras installed at the facilities

300

cameras used at Hong Kong airport in the parking lot



## Turkey



The vehicle recognition system is an integral part of the Safe City project. At the moment, the pilot project has been successfully tested in several regions, resulting in:

- 1 VisionLabs vehicle recognition software is being implemented in several regions of Turkey
- 2 More than 1,000 cameras across the country are involved in the project.

## Vietnam



- 1 The software allows to recognize vehicles, their license plates and attributes
- 2 Measuring speed violations at intersections and highways
- 2 More than 10 thousand vehicle detections per day

## Argentina



The solution improves digital traffic control and automates the detection of traffic violations using the following technologies:

- 1 Identification of vehicle models and attributes
- 2 Car license plate recognition

# Transport access control



Creation of a control system for checkpoints on the state page. The project is aimed at equipping entry and exit groups of checkpoints across the state border of the Russian Federation with a video analytics system for automatic recording and recognition of vehicle attributes for the purpose of further recording and analysis.

The system has a two-level architecture: federal and local levels.

10

checkpoints are equipped with a video surveillance system as part of the project

> 160

cameras connected to the system

4

each

cameras are located at each entry and exit groups

80

servers are used to implement the system



- Project to implement a vehicle shipment priority system for the Ryazan Oil Refinery
- It took 1 month to implement the system



- The project to introduce automated checkpoints was implemented in 2 hospitals in Moscow
- 3 checkpoints were implemented at each facility
- Project scaling potential reaches 200 hospitals



- Entry and exit through checkpoints at the Ministry of Emergency Situations facility is carried out up to 300 times a day
- Less than 3 seconds are needed for the system to detect a gas barrier, recognize and open the barrier

P—A



- 6 access points to the territory are equipped with a vehicle recognition system
- 12 video streams processed at the entrance
- Less than 1 second turnstile response time

# Time tracking and proctoring



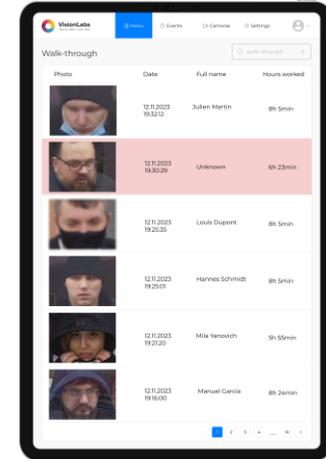
In order to automate control over employees, it was decided to implement a system for tracking employee work activity. VisionLabs, together with partner Verme, has implemented a solution that allows collecting data on employee work activity using face recognition technology. The solution allows to mark those employees who have low work activity, track the number of working hours of employees, track lateness and early departures from the workplace.

**7** terminals installed in MEDSI hospitals

**3%** share of employees being late for shifts among those reported during the period

**~ 98%** accuracy of recognition of installed terminals

**~380** hours of lateness and early departure from shift per month recorded by the system



- Work time tracking and employee access control to work computers while working remotely
- More than 4 thousand employees received remote access to the system



- Once every 15 minutes, the image from the webcam is sent to the database
- A new module is available for 3 editions: "Corporate Portal", "Enterprise", "Online Store + CRM"



- More than 10 thousand students use the Luna Exam system to take exams at MSUTU
- It takes less than 3 minutes to confirm your identity using biometrics



- More than 150 biometric terminals have been installed at the headquarters of Sistema Group
- More than 150 thousand people work in the companies of the Sistema Group

# Production control



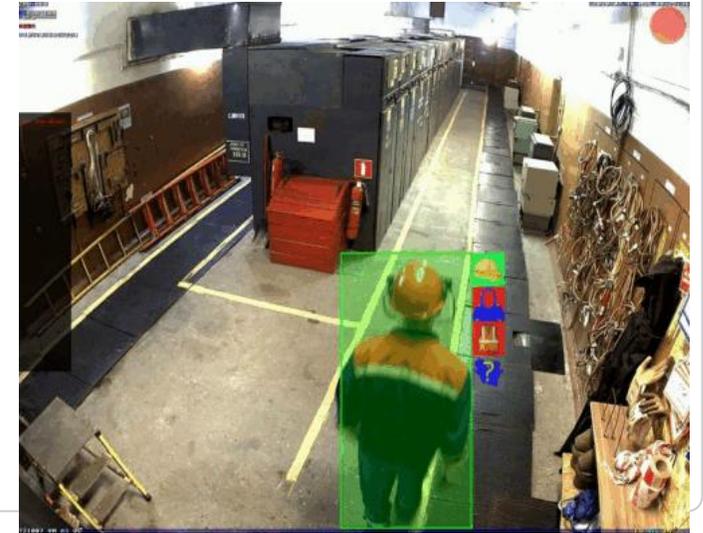
EVRAZ production has implemented a solution that allows automatic quality control of the supplied billet before rolling in terms of identifying surface defects. The software developed by VisionLabs not only performs defect detection, but also classifies them. If a defect is detected, the system sends a notification to the operator and displays detailed information on his workstation.

**5** classes of defects on workpieces can be recognized by the system

**< 1 min** necessary to recognize a defect from the moment the workpiece passes the detection point

**4** cameras installed on the rolling mill to detect workpiece defects

**since 2023** 1 machine is equipped with a defect recognition system



One of the significant points in the development strategy of PJSC Segezha Group is digitalization at all stages of the production chain to increase business efficiency. As a result, there is a discussion on the implementation of computer vision technologies in production to solve the following problems: detecting defects and equipment stoppages and monitoring work activity and generating reports - using biometric access control systems and video analytics systems with a face and body recognition system in the production area.

**2 times** cases of untimely equipment shutdown due to material breakage have been reduced

**by ~ 17%** reduced risk of complete production stop due to prompt notification

**by 33%** less defects with timely detection of anomalies and suspension of processes

**< 1 sec** operating time of detection algorithms



# Solving problems using CV technologies



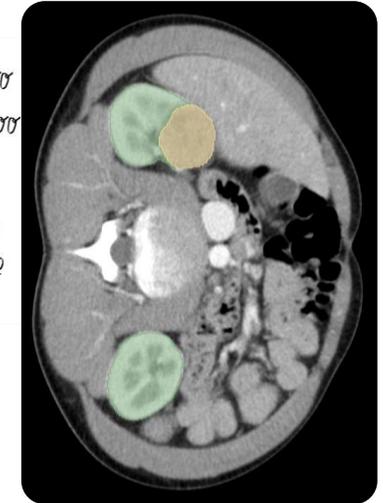
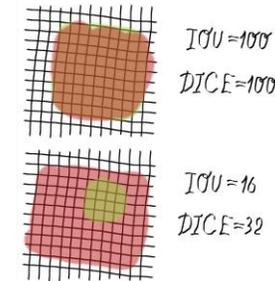
Together with the Moscow Department of Health, the integration of the LUNA MEDIUM service for identifying kidney pathologies was implemented. The service allows to automatically detect the localization of kidney space-occupying lesions on native CT images without contrast. Based on the results of the study, the following is provided: an assessment of the probability of the presence of volumetric formations, a structured report in the DICOM SR format, an additional series in the DICOM SC format containing the contours of the detected formations applied over the original images.

by **40%** the speed of primary processing of patient images increases

✓ integration with MosMed has been developed and data acquisition for testing has been configured

By **35%** the burden on doctors in terms of carrying out monotonous operations is reduced

**85/100** clinical evaluation of the service as part of working with MosMed



A set of libraries has been built into the KION platform, which allows to detect and compare the faces of actors in films, trailers or photographs in an online cinema, and improve unique recommendations for users.

- More than 4 million people - online cinema audience
- 4 hours average number of hours spent watching video service content
- 12 thousand units of content are presented on the service



The smart display from Sberbank SberPortal is equipped with VisionLabs technologies for detecting faces and bodies, as well as recognizing gestures. VisionLabs implemented this functionality using trained neural networks.

- Recognizes more than 15 static and dynamic gestures
- 95% accuracy of gesture recognition
- Less than 300 ms to recognize one gesture



**VisionLabs**  
MACHINES CAN SEE

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