

PROBLEM



Unreasonable behaviour

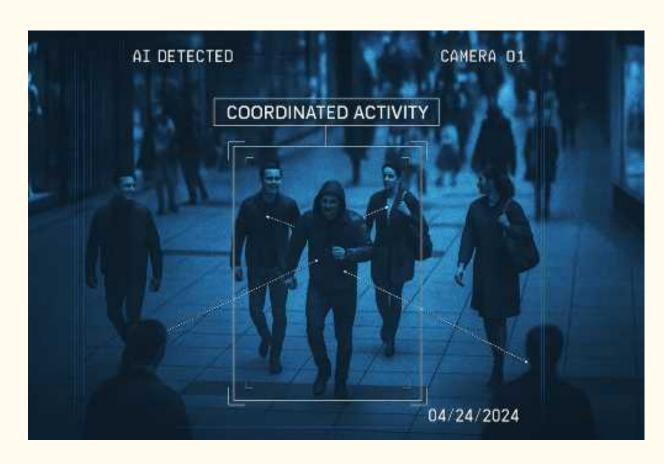


Hidden weapon detection

The problems of the existing surveillance and monitoring systems we aim to solve:



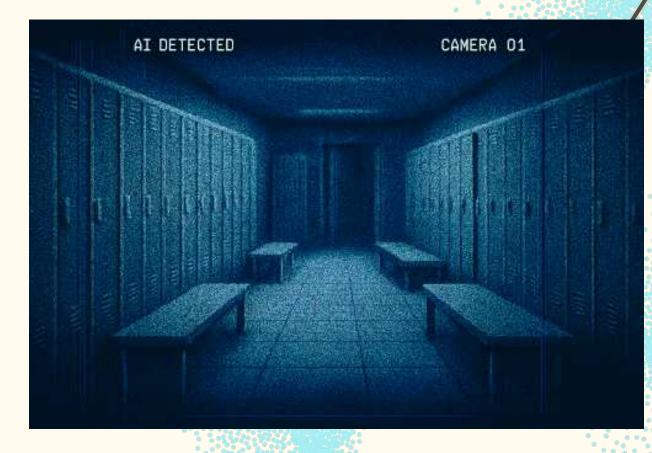
Disguise resistant re-identification



Groups / Coordinated activity



Unreporting / Silent victim



CCTV-free zones coverage

SOLUTION

Ethogramio system analyses unique behavioural, anthropometric, and body motion characteristics of a person to create a next generation digital motion-based profile.





We use:

- Body motion
- **Gestures**
- Behavioural patterns
- Anthropometry

We do not use:

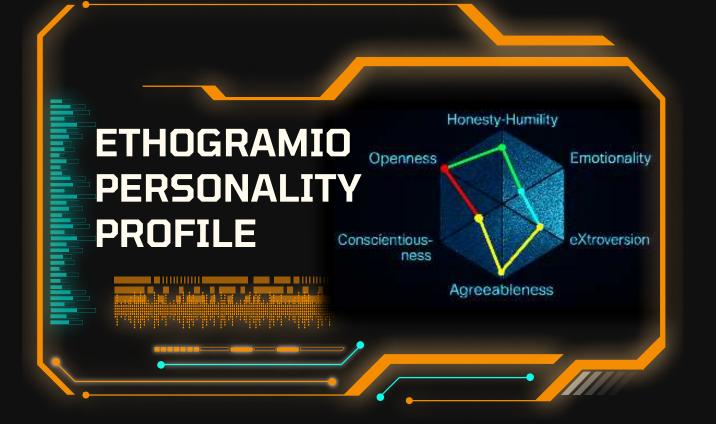
- **X** Facial recognition
- **X** Finger print
- **X** Iris scan
- **X** RFID

DATA PROCESSING

HONESTY-HUMILITY 3.00
SINCERITY 3.25
FAIRNESS 3.00
GREED-AVOIDANCE 2.50
MODESTY 3.25
EMOTIONALITY 3.75
FEARFULNESS 3.75
ANXIETY 4.00
DEPENDENCE 3.50
SENTIMENTALITY 3.75
EXTRAVERSION 4.06
SOC SELF-ESTEEM 4.00
SOC BOLDNESS 4.25
SOCIABILITY 4.25
LIVELINESS 3.75
AGREEABLENESS 3.06

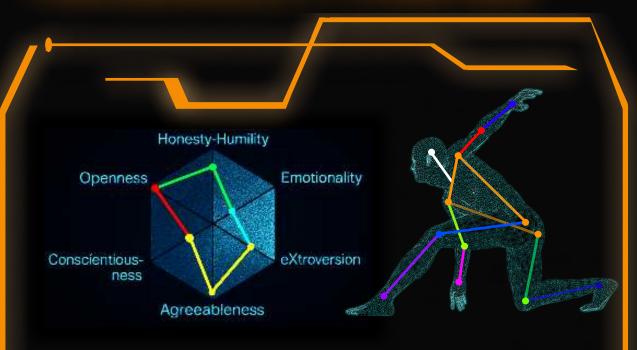
FORGIVINGNESS 3.25
GENTLENESS 3.00
FLEXIBILITY 3.25
PATIENCE 2.75
CONS-NESS 4.06
ORGANIZATION 4.25
DILIGENCE 4.00
PERFECTIONISM 4.00
PRUDENCE 4.00
OP. TO EX. 3.44
AEST. APP-TION 3.75
INQUISITIVENESS 3.75
CREATIVITY 2.75
UNCON-LITY 3.50
ALTRUISM 3.25





HOWIT WORKS:

ETHOGRAMIO PERSONALITY PROFILE



PSYCHO-TYPE DATA

A personality traits profile based on HEXACO system

BODY-MOTION DATA

A set of unique characteristics of person's body motion patterns

ANTHROPOMETRY DATA

Person's height, limbs' size, and proportions





HUMAN BEHAVIOUR AI ANALYSIS

By analysing both spatial and temporal data, motion patterns, gestures, and interactions, we can enhance public and national security through:

- Detecting potentially threatening individuals
- Identifying disguised or avoiding CCTV individuals
- Real-time flagging of suspicious behaviour
- Identifying silent victims of trauma or abuse

Targeted in our next stage of internal investment:

- Detecting hidden carrying of guns, knives, or machetes
- Identifying group formations and coordinated activities
- Covering CCTV blind spots using LiDAR data

MARKET

While behavioural analysis-based products are still emerging, we can leverage existing data from the most comparable technology - **facial recognition** - for competitive analysis.

Technavio gives us a USD 8.017 billion market. The facial recognition market size is forecast to increase by USD 11.82 billion, at a 22.2% CAGR between 2023 and 2028



TAM

\$8B

in 2024



\$20B

in 2028

For the core product "Personality Profile" the TAM is expected to be at least equivalent to that of the facial recognition market.

SAM

In light of recent government investments in the USA and Europe, we see national police and security services as primary adopters of the "Personality Profile" product.

As well as **PENITENTIARY INSTITUTIONS**, **BOARDER GUARD**, **DEFENCE**, **AND CASINOS**.

SOM

As we're starting our MVP development with focus on penitentiary institutions, we define this industry as our SOM for the core product "Personality Profile".

There 960 penitentiary institutions within the 14 most developed European countries

and 4780 in the USA.

COMPETITION

FACIAL RECOGNITION

There are multiple companies providing Facial Recognition for surveillance, identification and tracking. For example - Clearview AI. However, all of these products rely solely on facial data and fail when the face cannot be scanned.

GAIT PROFILING

One of the closest comparable products on the market is Watrix, a Chinese company specialising in gait profiling and person identification. In 2021, they received \$42 million in funding and currently provide services to the Beijing Police. While Watrix uses gait profiling, we go a step further - our Personality Profile incorporates multiple layers of motion and behavioural data, enabling deeper analysis and broader application.

CCTV-BASED GAIT RECOGNITION

Unlike the European TENSOR and the US IARPA's BRIAR projects, we focus on a compact, microcomputer-based capturing device equipped with an RGB camera and LiDAR or a LiDAR-only configuration. Our objective goes beyond simple gait identification - we aim to predict a psychoprofile and potential future actions.

PREVIOUS GENERATION

Apart from automation and computer vision models, there are "old school" technologies used to identify certain parameters of gait and gestures. Companies like NASS still help to train aviation and transportation security staff using a world-renowned Behaviour Pattern Recognition programme.

Something very close to what ethogramio will do, but using Al.

PEOPLE COUNTING TECHNOLOGIES

Several companies provide recognition and tracking based solely on physical attributes, such as clothing type and colour or body shape. As an example – People Tracker by CyberLink.

UPCOMING TECHNOLOGIES

Research is increasingly focusing on the underlying causes of criminal behaviour and personality traits. This places Ethogramio in line with the latest developments in sociology and criminology.

DEGREE OF INNOVATION

Personality Profiles by Ethogramio is a radical innovation rather than incremental. Due to loT computation power and sufficient level of data processing, we can finally open a new chapter in human behaviour studies. Our machine learning algorithms went further than present facial and gait recognition technologies. The whole human body, its motion, specific gestures and gait patterns are the source for a deep analysis.

Our product is not only aimed at advancing human identification and profiling to the next stage of development but also to producing valuable data for upcoming public security, military and retail R&D projects and collaborations with academia.

FUTURE PRODUCTS AND DEVELOPMENTS BASED ON THE ETHOGRAMIO CORE:



DNA matching collaboration



Body motion for film CGI based on personality profiles



Drone and robot-based identification

