

A.I.MOTIONS

A.I.motions is an AI-based platform that receives data from 4 different sensors and uses machine learning technics in order to generate accurate assumptions about people's emotions: facial expressions, eye tracking, body language and intonation of voice. We aim to translate the most accurate emotions in order to help improve the crucial social impairment of people on the autism spectrum.

Nowadays autistic people have a problem recognizing emotional states and social behaviors of others around them. Our platform can detect for them the social expressions of others explicitly, help them be more socially involved, and can ease their social interactions and involvement, and improve their everyday life.



Noga
Schlisser



Inbar
Gen



Zeev
Slobodnik



Saar
Yazdi

ANTI-CYBER BULLYING



Nophar
Hochenberg

The lack of face-to-face interaction that technology provides makes it much easier for children to cross the line from joking to bullying. Anti-Cyber Bullying is an automated system for cyberbullying detection, intended to serve schools and other educational institutions, based on the technologies of network crawling, natural language processing techniques (NLP), image analytics and machine learning algorithms.



Reut
Tzuber

The system will run a "web crawler" on the social networks where the children are active (Facebook, Twitter, Blogs etc.) and through content analysis, it will be able to identify cyberbullying, warn about it and give all the details about it. Much of the correspondence today takes place in "WhatsApp", so how do we fight the phenomenon in private text messages? While all conversations are encrypted, the system analyzes correspondence patterns and predicts bullying without message content, using activity data and machine learning models. Prediction is done based on attributes such as frequency of activity, response times and length of messages.

We believe that our solution to providing early detection of cyberbullying is of key importance to youngsters' mental well-being and may even prevent more serious consequences, including suicides.

OPTIFOOD

Optifood's goal is to provide optimal tailored consumption recommendations in order to reduce food waste. These recommendations will be delivered via smartphone application and website and will be based on state-of-the-art Deep Reinforcement Learning and IOT.

Grocery shopping will be accurately inferred by smart refrigerators and food dumping will be accurately measured by smart trash cans. Hence, true consumption will be evaluated and the model will provide optimal consumption recommendations with an easy and simple UI.



Rotem
Maanit



Nadav
Shalit



Yuval
Yudovitch

BABY FACE



Mor
Tubul

Forgetting babies/children in the car is a pervasive problem that affects families all around the world. We aim to most effectively prevent these occurrences using thermal sensing and recognition algorithms. Our idea is an AI-based system that uses a body thermal recognition technology in order to save babies'/children's lives.

The system will utilize a thermal camera that will map the car's interior. Its data will be passed to a learning analytics system with classification capabilities, which has been trained on a tagged library of thermal images, following a well-representative distribution of real-world scenarios.



Shani
Damari

The actual recognition/classification will be executed by a computing unit embedded within the car (e.g., on a Mobileye unit). Once the engine is turned off, the cameras and application will be automatically activated (without human interference). The application will be connected via wifi/bluetooth connection. The application has an alarm that will set off when a living creature is detected and the car's temperature is at a high level, or five minutes have passed. If the system still detects a child or a baby, then the rear windows will be opened.

SARCO-TRAINING

SarcoTraining is a Personal Training System designed to support Sarcopenia patients in order to reduce symptoms and prevent illness progression using AI technologies.

The system is based on the interaction between the patients, a hardware appliance and a software application.

The hardware package includes a motion-tracking camera (based on Intel RealSense Technology) and wearable modular smart bands. The app will analyze the information gathered from the camera and the band's sensors to create customized training programs.



Mor
Hadjes



Zohar
Potash



Limor
Kushnirsky



Etai
Vechter

WHAT TO EAT



Marina
Zak

After a long day at work or caring for kids at home, deciding what to eat can be a menial but frustrating process. What to Eat is a phone app to make recommendations for what to eat for your next meal. The recommendations are based on user input, personal preferences and information, location and health data, and an AI backend uses that data to create relevant recommendations for users.



Divya
Rustagi

The input of user data is simplified using Intel computer vision like OpenVino so that users only need to take pictures of their meals to provide consistent, quality user input. The AI generalizes health, location, and localized user data to create healthier yet personalized user recommendations so that users gradually become healthier while spending less effort making healthier decisions.



Lee
Cohen



Zachary
Williams

SEE GUARD

"SeeGuard" is an AI assistance system for lifeguards to identify risks at the beach, using drones and advanced technology. "SeeGuard" is a platform based on computer vision technology. The drone will be connected to a video camera to classify objects. Then the platform will detect each swimmer using object detection and will gather data about him. The data will be used to analyze multiple risk parameters that will indicate the swimmer's risk of drowning. In addition, the lifeguard can use the system to mark dangerous areas in the water along the seashore.

The data will be shown on the lifeguard's monitor and will alert him about any potential risk. When an alarm is activated two actions will be taken: the drone will levitate above the potential risk and the lifeguard's screen will mark the position of the risk, which can also be zoomed in on.

The system will integrate with Intel's AI computer vision technology and Intel's communications and synchronization system for drones.



Shay
Hurwitz



Guy
Raviv



Woody
Gover

Q-DOC

The idea behind Q-Doc is to place an AI-driven system in the reception of each clinic/ER capable of conducting basic tests and asking relevant questions to each patient. According to his answers and the reported symptoms, the patient will be given an initial diagnosis by Q-Doc to determine priority of treatment, routing to a specialized department and further treatment required before seeing a doctor. When needed, Q-DOC will alert the medical staff if the patient's condition requires immediate treatment.

Q-DOC will supply a recommendation based on the learning from millions of cases and on the medical history of the patient himself. All this takes place while the patient is in the queue to see the doctor, thus shortening the amount of time a patient spends waiting, and making his appointment shorter and utilized for proper treatment.



Hadar
Yam

WE HEAR YOU

Deafness and hearing impairments affect tens of millions of people around the world. Many of these people rely on sign language to communicate. However, sign language is not global and varies from region to region. Sometimes there are even several sign languages within a country that has just one dominant spoken language. As a result, the deaf and the hearing-impaired face difficulties not only in communicating with hearing people, but also communicating with each other. The We Hear You project addresses this difficulty and provides a software-based solution that can translate sign language movements to voice or writing, and vice versa. We Hear You, which is like Google Translate for sign language, will allow for fast and convenient communication between hearing people and the hearing impaired, and between hearing impaired individuals from different regions or countries. Over time, the We Hear You system learns more and more words and idioms of sign language, which allows for more accurate translations. We Hear You will allow hearing-impaired individuals to communicate with anyone, no matter their native spoken or sign language. As a result, the hearing impaired will be able to integrate into the workforce more successfully, communicate effectively with others in their environment, and overcome loneliness and social isolation due to difficulties communicating.



Adam Bismut



Netanel
Eliav



Rami
Kandhorov