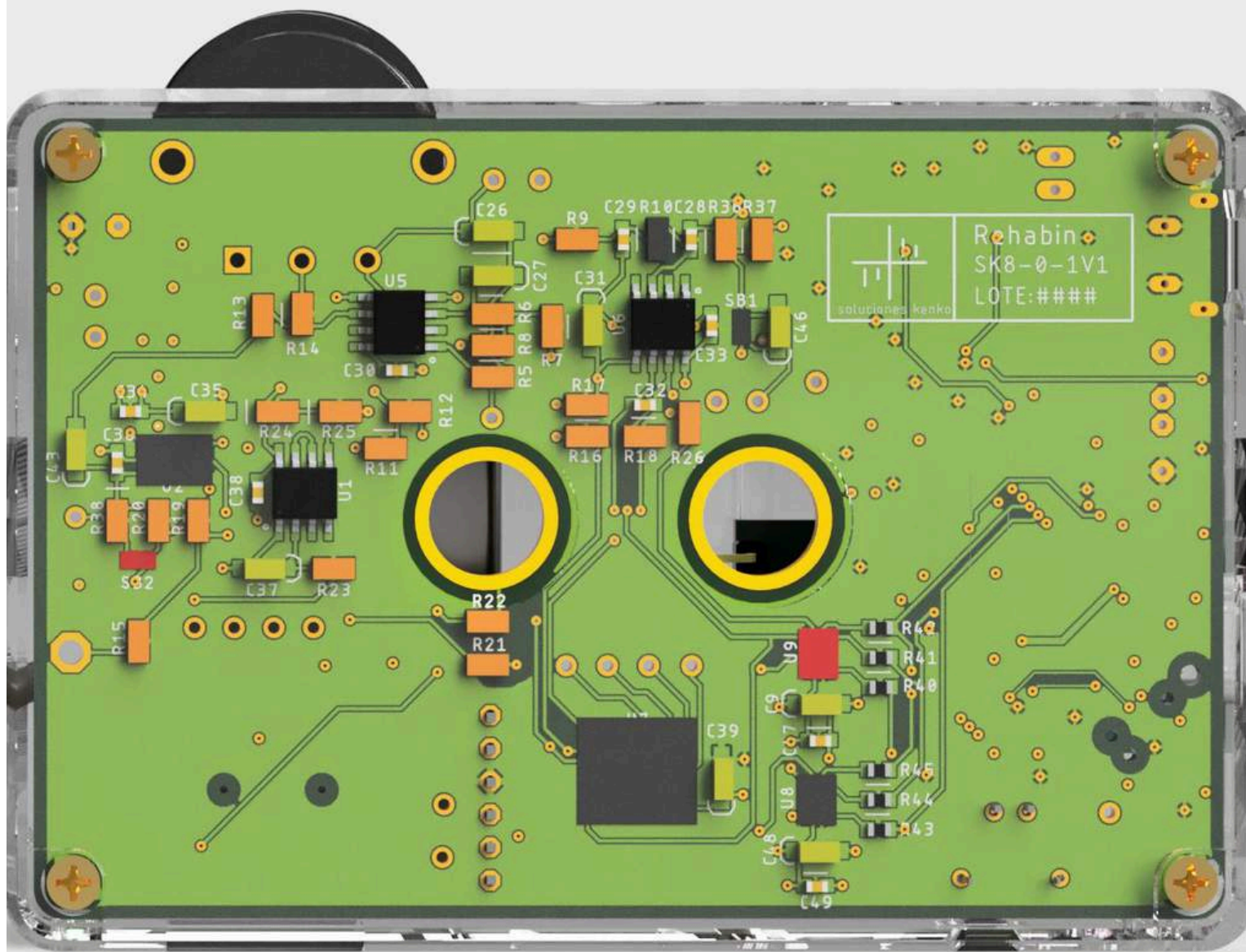




Y Engineering

Empowering Innovation
Engineering Impact



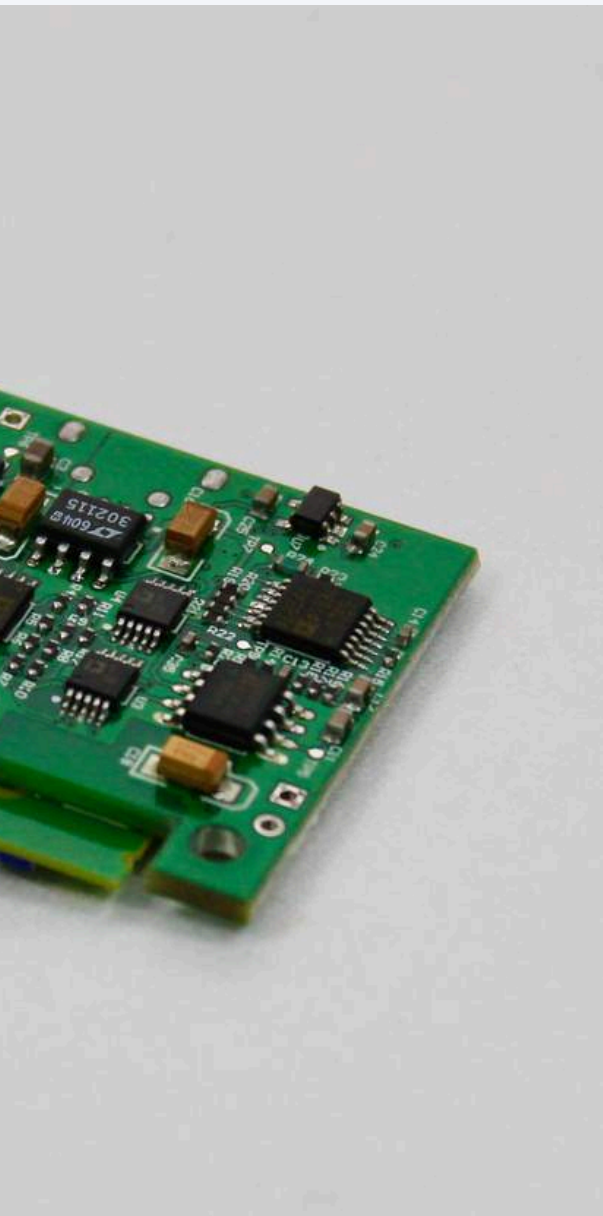


Y Engineering



























Empowering Innovation
Engineering Impact












PORTFOLIO Since 2017











Innovative Healthcare Startups

-     ECGlove 00 - Portable EKG
-     Rehabin - Portable EMG
-    Disposable Hysteroscope
-   Signal Plug
-    Emysor - Electrical larynx
-     MioTracker
-  Fluid Management System
-   Hope Mask - Kn95 surgical mask
-  Cognixion ONE - BCI








Tech-Forward Educational Institutions

-     RCPractica - CPR trainer
-     RCPractica V2 Pro- CPR trainer
-    Kabanta - AED training tool

Emerging Consumer Electronics Brands

-     Visual Aid Device
-     Liquid dispenser

Sustainability-Focused Agro-Industrial Firms

-     LP GAS IoT
-    Medical device tracker

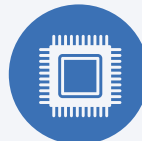
// How we help



Mechanical



Firmware



Hardware



Manufacture

a catalogue
of a product
development
firm

We're excited to share with you **the essence of our work**, our journey ahead, and how our core values and visual identity reflect our commitment to engineering excellence.

The vision-Illuminating the future, one innovation at a time.

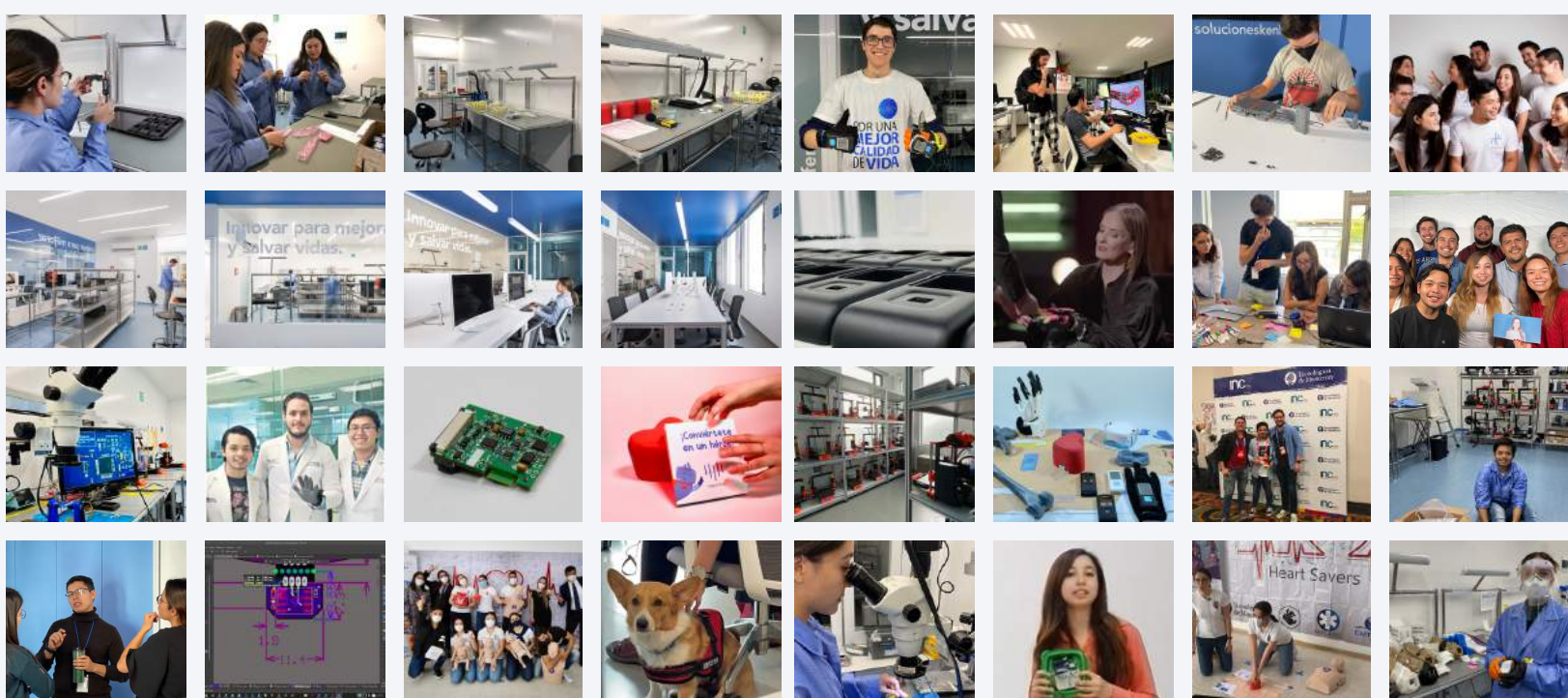
The Mission- Transforming imagination into reality through engineering excellence.

Empathy: We strive to deeply understand the challenges and aspirations of those we work with, ensuring our solutions are not only innovative but also genuinely meet the needs of users and stakeholders
























Unity and Diversity - We believe that bringing together varied perspectives, skills, and experiences sparks innovation and creativity

Trust - Like the strong bonds that hold together the fellowship in a quest, our trust in each other and our clients is unbreakable, ensuring a journey together that is both successful and fulfilling.

Wisdom and Guidance -
Empowering our clients
with insights and solutions
that lead to enlightenment
and progress in the
journey of product
development.



Innovative Healthcare Startups

-     ECGlove 00 - Portable EKG
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ecglove 00
Alan Fridman, Daniel Aragón,
Yoku Sashida

US20200037953A1 Patent
Wearable Device
Bluetooth EKG

We created a portable EKG to solve the shortage of EKGs in hospitals, thus supporting timely diagnosis.

We manufacture the entire device, from software, and hardware, to industrial design and packaging. All to ensure the best quality in our production line certified by NOM 241 for medical devices.

ECGlove is an EKG on a glove that allows doctors to have an EKG at hand for convenient diagnosis on emergency patients.

We also created an app through which you can access all the studies you perform, edit and attach them to the patient's record.

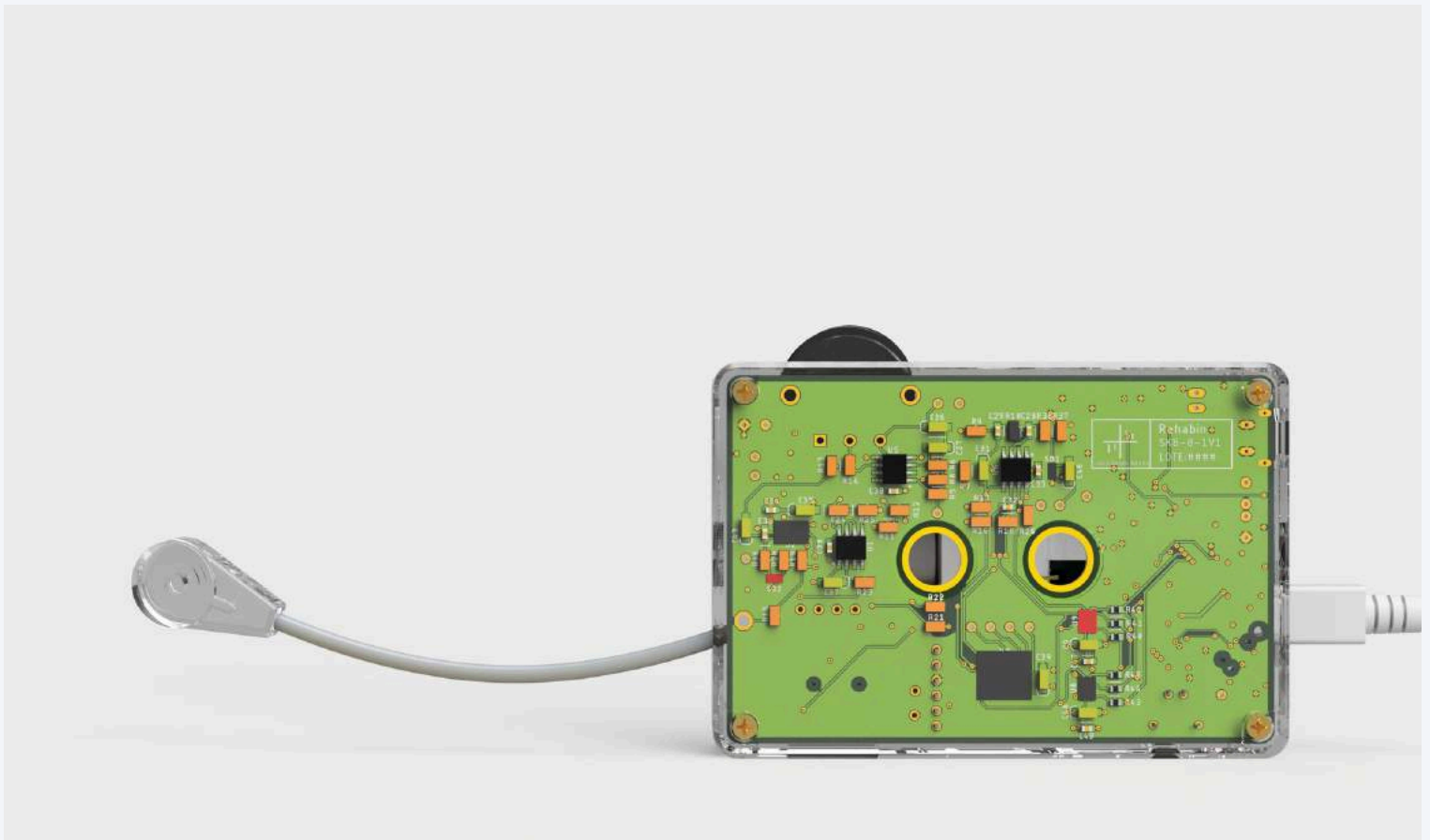




See more:

medgadget





Rehabin
Dra. Rita Fuentes
Bluetooth EMG

WO2019209098A1 WIPO (PCT)
Wearable Device
Now MioTracker

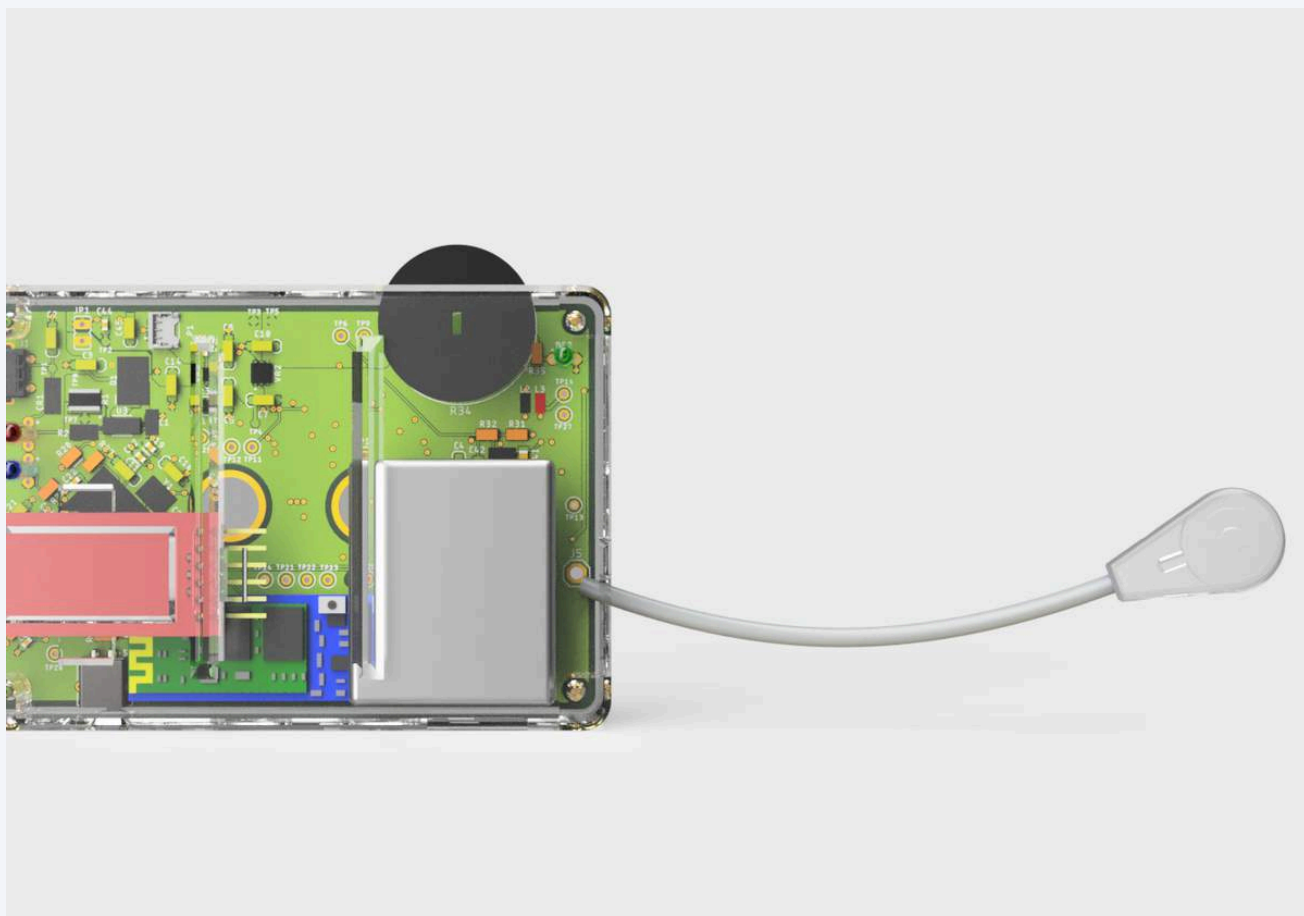
Rehabin is a medical device that helps physiotherapists measure the progress of muscle rehabilitation of patients through the improvement of their electric signals. It's an apparatus for assessing and monitoring muscle performance with self-adjusting amplitude gain.

Dra. Rita realized that there was a need to know if patients in physical therapy were making even minimal progress and to have a compilation of the progress to be able to compare and evaluate the patient or change the focus.

The main function of the Rehabin is to capture the signals that show progress has been made with the patient and motivate the patient to continue with the therapies.

It consists of electrodes that capture the electrical signals sent by the brain when moving the muscles, which, when placed on a limb, it records the activity and capture it on a graph using our software.

We designed an app on which you can see the registered study and electrical activity inside the muscles so the physiotherapist can evaluate the progress of each patient and keep a record of the prior sessions.

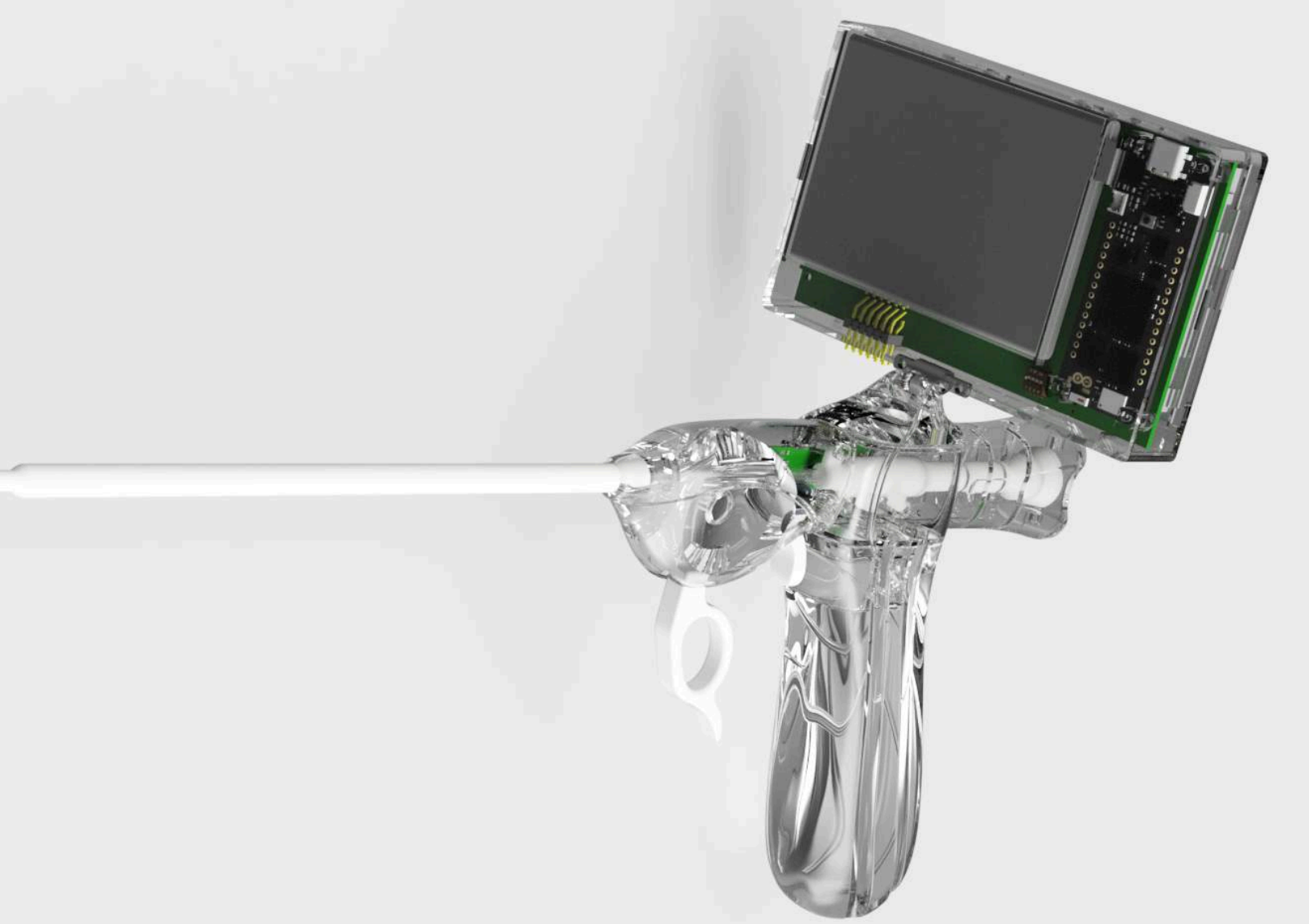


Ph.D. Rita Fuentes holds 2 patents, one technology transfer, 7 additional national patent applications, 3 PCT applications, and 4 public copyright registrations.

See more:

<https://conecta.tec.mx/es/noticias/guadalajara/emprendedores/rehabilitacion-crean-dispositivo-para-medir-efectividad-de>





Butterfly Bio.

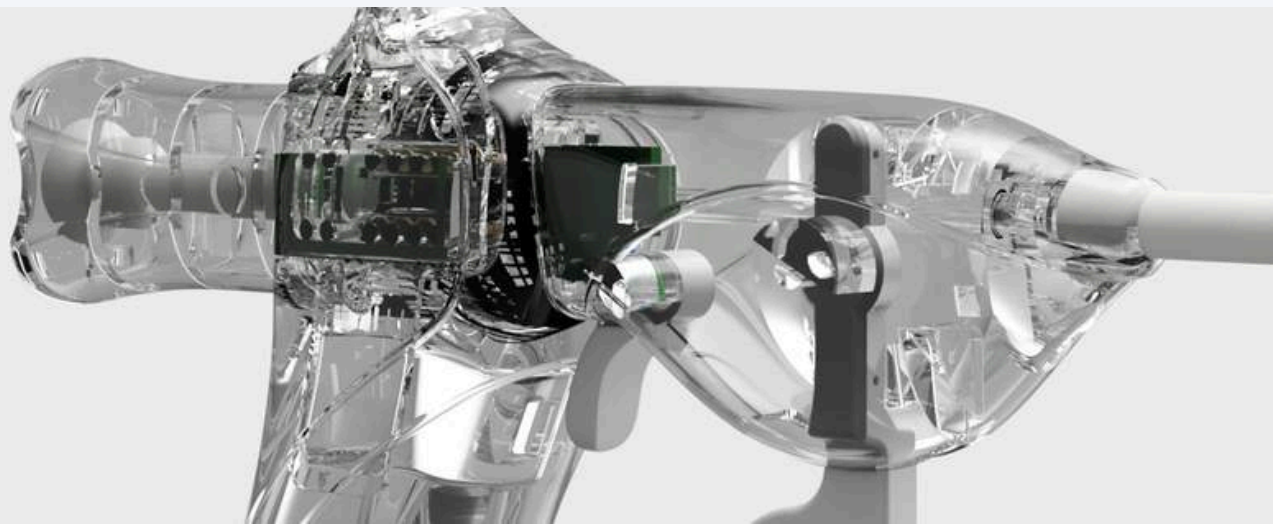
Medical Device Class II

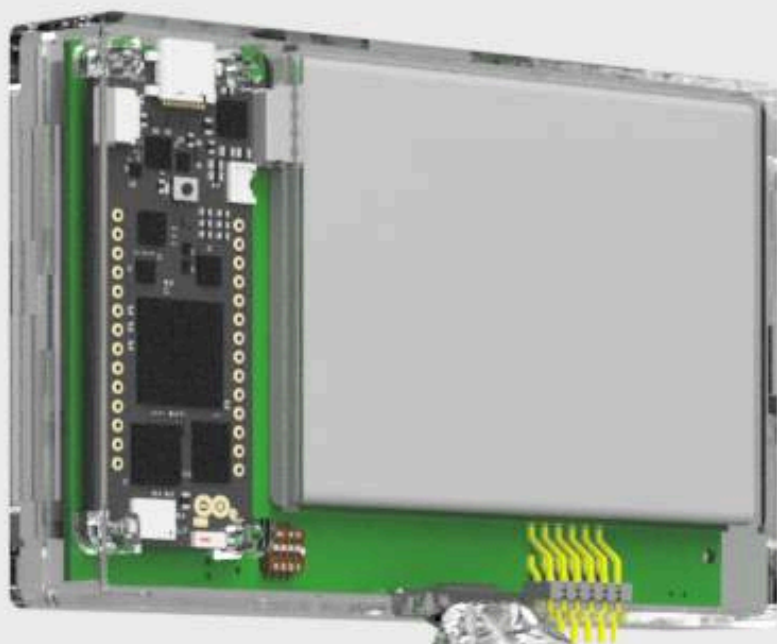
Electrical design.

Mechanical design.

Firmware.

Pick and Place assemble in house







Signal Plug
Dra. Susana Gómez;
pediatrician, cardiologist, and
electrophysiologist.

Patent Pending
Medical Device Class I
Prototype

Signal Plug is an ECG adapter
that allows doctors to use an
adult ECG with neonatal
patients without interference
or harm to the patient skin.





e-mysor
Paulo V.

WO2020046098A1 WIPO (PCT)
Prototype

Electrical larynx with voice interpretation and processing. Bluetooth connectivity and Android application.

Patent: Wireless, wearable system and device for recording, processing and playing back sounds for people with dystrophy in their respiratory system.

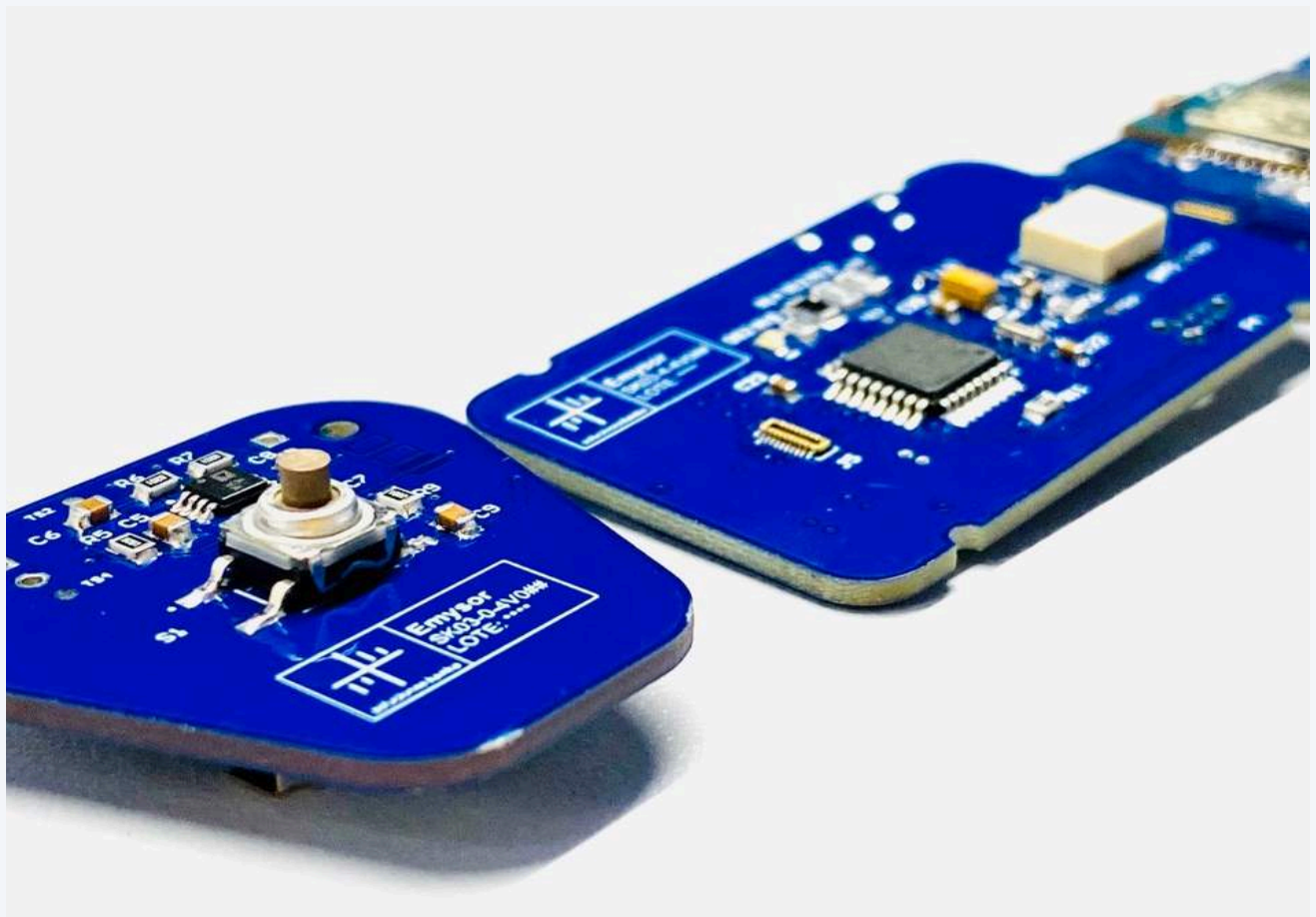
The invention relates to a system and device for recording, processing and playing back sounds for people with dystrophy in their respiratory system.

That collects the sounds emitted by the sound source with the variations of energy, amplitude and frequency caused by the movement of the pharynx or throat; conditioning of the signals to obtain a signal with limited voltage and frequency;

An external power source supplies the plurality of modules; a wireless communication module allowing the connectivity of said device to a local network and to an external server/cloud for digital processing,

For information storage, optimisation and adjustment of filtering and voice-reconstruction algorithms and interacting with a mobile platform (cellphone, tablet and/or smartphones), with at least one type of wireless connection and with speakers or sound playback systems.

Where the voice derived from the information collected from the device is processed, reconstructed and executed, and digital processing in said external server/cloud.

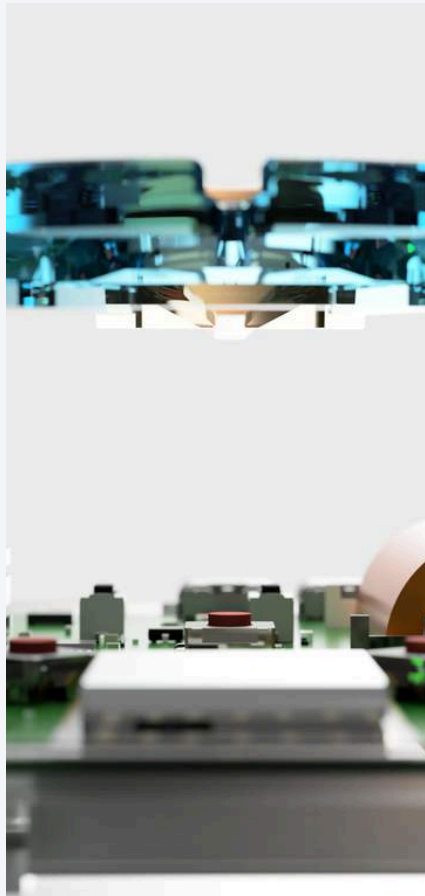




Miotracker
Dra. Rita Fuentes
WiFi EMG

Building on the success and innovative foundation of Rehabin, Y Engineering is proud to unveil MioTracker, our latest breakthrough designed to revolutionize the way physiotherapists track and support patient progress.

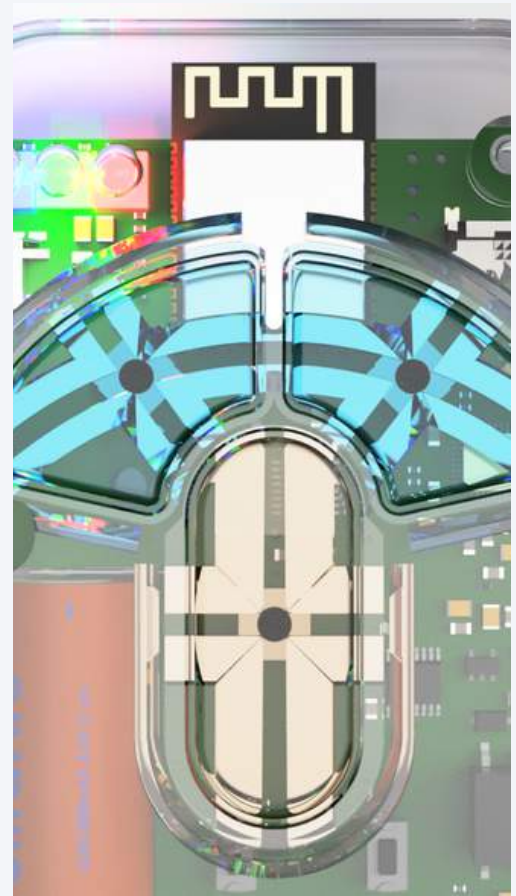
Developed over an intense two-month period from the ground up, MioTracker represents a significant leap forward in rehabilitation technology.



WO2019209098A1 WIPO (PCT)
Wearable Device

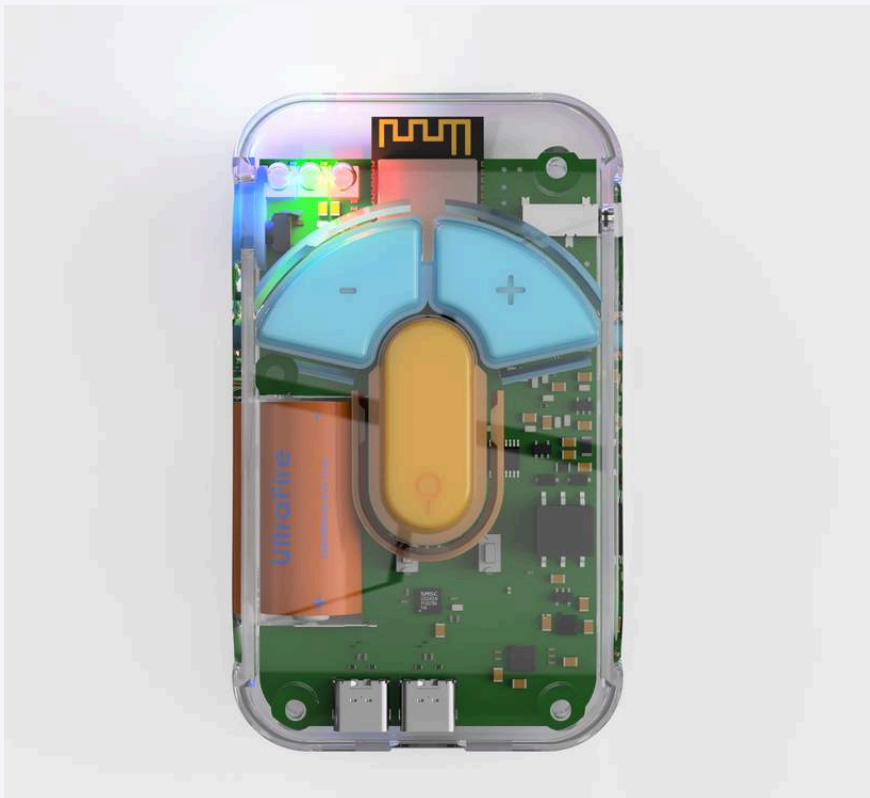
Enhanced Usability: With a focus on user-friendly design, MioTracker comes equipped with a rechargeable battery and USB Type-C for efficient charging and data transfer.

Its intuitive interface includes buttons to easily adjust the signal gain, ensuring physiotherapists can tailor the sensitivity to each patient's specific needs.



Empowering Physiotherapists and Patients: Inspired by Dr. Rita's vision to track even the minimal progress in physical therapy patients, MioTracker not only aids in compiling and comparing progress but also serves as a motivational tool for patients.

Through the app, physiotherapists can access comprehensive records of each session, facilitating informed decisions and personalized treatment adjustments.



MioTracker exemplifies Y Engineering's commitment to empowering healthcare professionals with cutting-edge tools.

By providing a detailed and accessible platform for monitoring progress, MioTracker is set to become an indispensable asset in the field of rehabilitation, motivating patients and guiding therapists towards more effective treatments.





Fluid Management System
Butterfly Bio

Firmware Programming
Microchip MCU

Fluid Management System (FMS), designed to control and monitor the irrigation fluid used during uterine lavage process.

This system aims to enhance the safety, precision, and effectiveness of uterine lavage procedures, commonly performed in gynecological diagnostics and treatments.



Hope Mask
Pandemic Project

Industrial Design
Manufacture

Hope Mask was an on-demand manufacturable mask, that protected medical personnel from covid-19 in their attempt of taking care of the patients without contracting the virus, using N95 filters

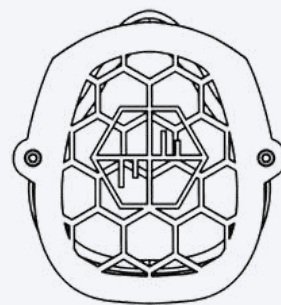


Fig.1





Cognixion ONE
Cognixion llc.












Firmware Programming
Design For Manufacture

The Cognixion ONE is a revolutionary assisted reality device – the bionic combination of AI, Augmented Reality and Assistive Technology.

Designed to help people with severe motor impairments communicate and interact more effectively and independently with the world around them.



Tech- Forward Educational Institutions

    RCPractica - CPR trainer
    RCPractica V2 Pro- CPR trainer
   Kabanta - AED training tool



RCPractica
Hands Only

More than 1,000 Units
Last Unit Sold

RCPractica is a tool that helps you learn "CPR, hands-only" maneuver, easy to understand for children and adults, and easy to transport so you can practice anywhere.

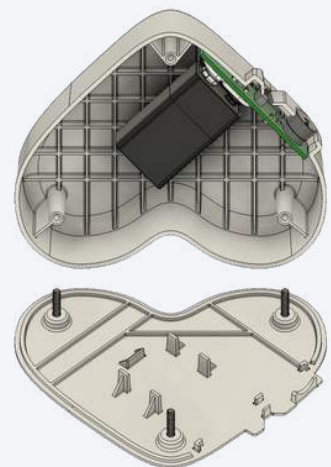
Rcpractica has the goal of helping people teach and learn the CPR maneuver. It has a feedback sound on rhythm and similar resistance to the thorax. It quickly became a favorite among paramedics and teaching centers.

We developed this product from concept to finished product, through all the stages of our methodology up to commercialization.

Our multidisciplinary team made this faster to develop.

Currently is the #1 product in Mercado Libre.

Microchip MCU









RCPractica V2 Pro
Mariana Delgado

More than 5,000 Units
Last Unit Sold

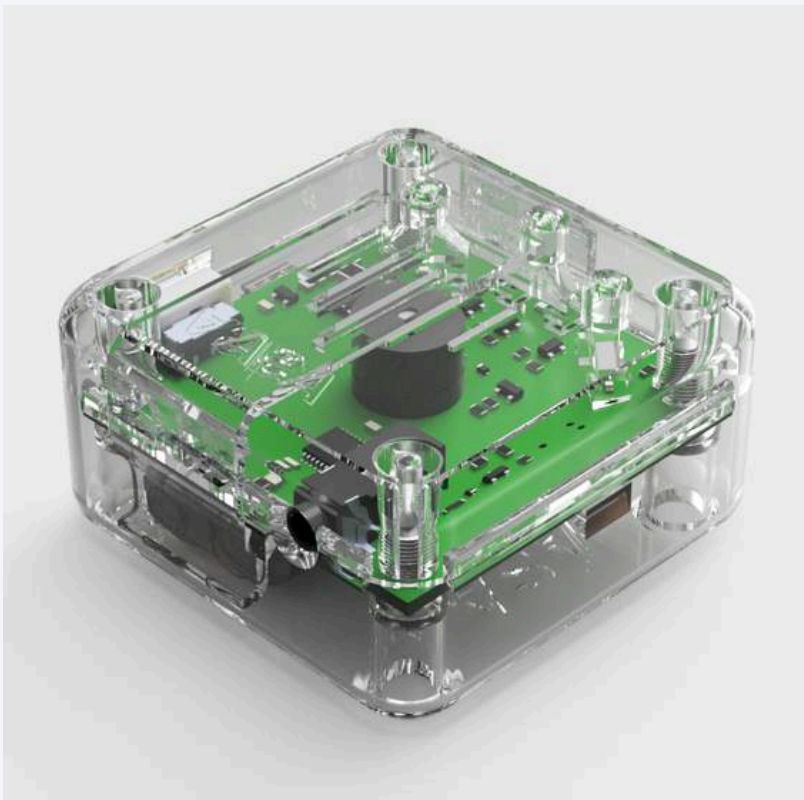
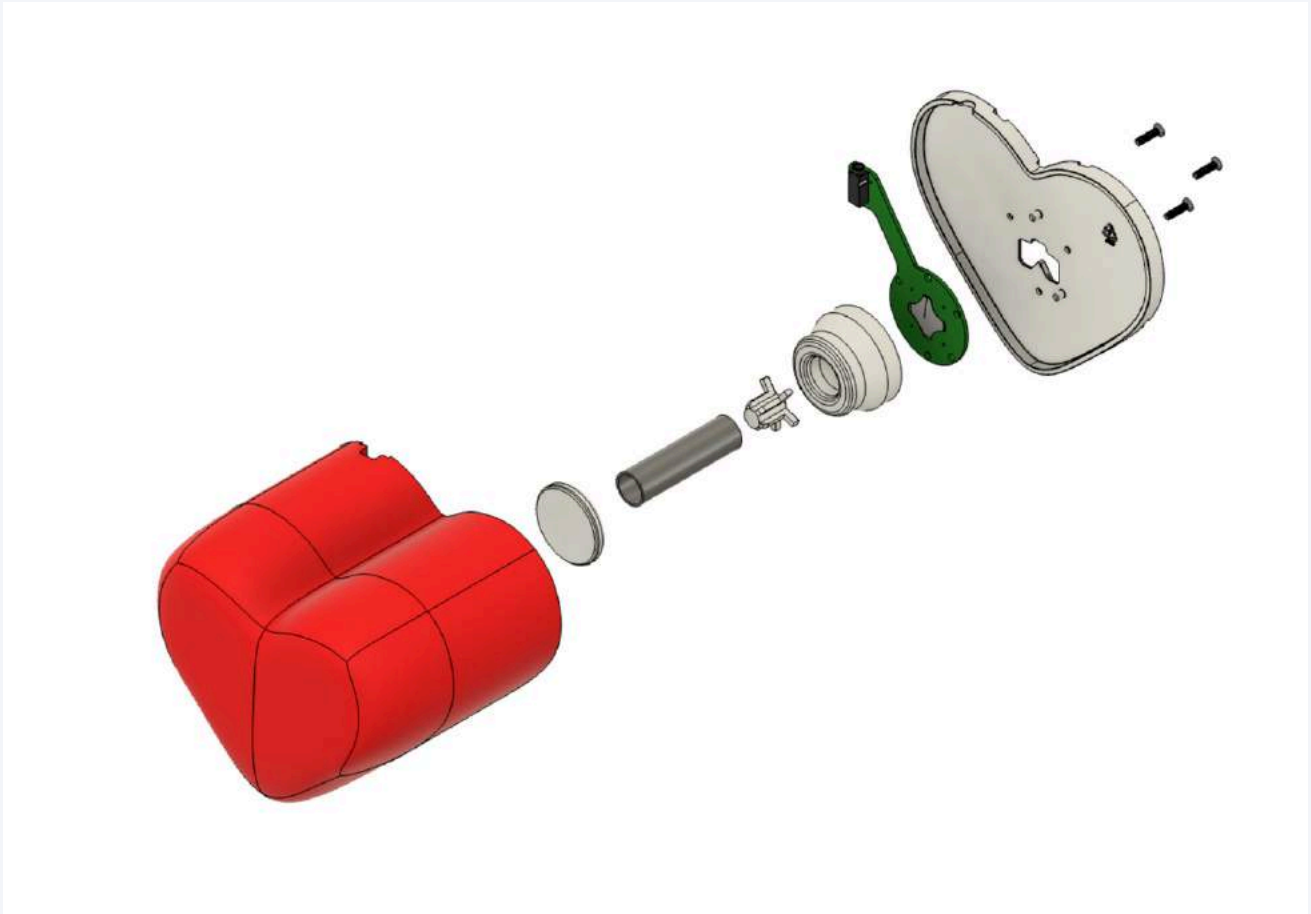
With this new version of RCPractica we offer professionals, dedicated to teaching Hands-Only CPR, a better tool to help them evaluate and achieve quality maneuvers.

Rcpractica has the goal of teaching people the CPR maneuver. This new version is aimed at health professionals who are dedicated to teaching first aid to others, with new features the rcpractica allows to evaluate the depth, rhythm, and quality of the maneuver.

Its feedback system is concentrated in a box outside the device. This modularity allows you to upgrade the unit as needed, making it a versatile device.

ST Microchip MCU







Kabanta Device
Kabanta SA de CV

Semi-Automatic Defibrillator
Trainer Device
Prototype

In 2023, Y Engineering unveiled a cutting-edge Semi-Automatic Defibrillator Trainer Device, revolutionizing emergency medical training.

This innovative tool allows instructors to simulate realistic patient vital sign scenarios, enhancing the training experience.

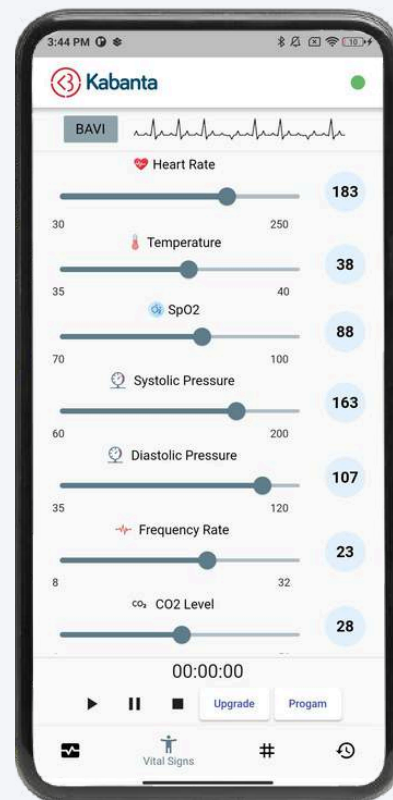
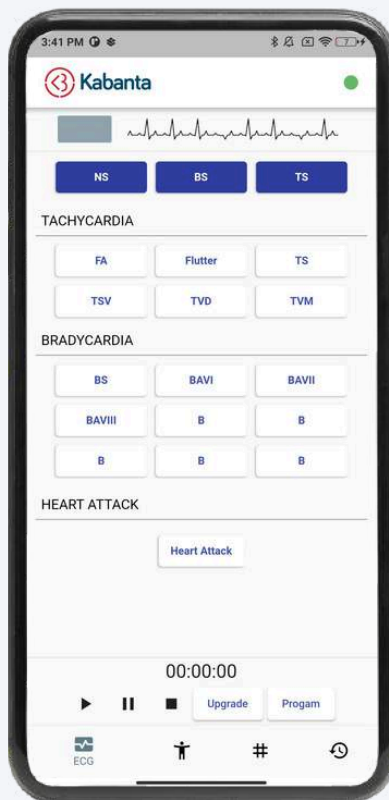
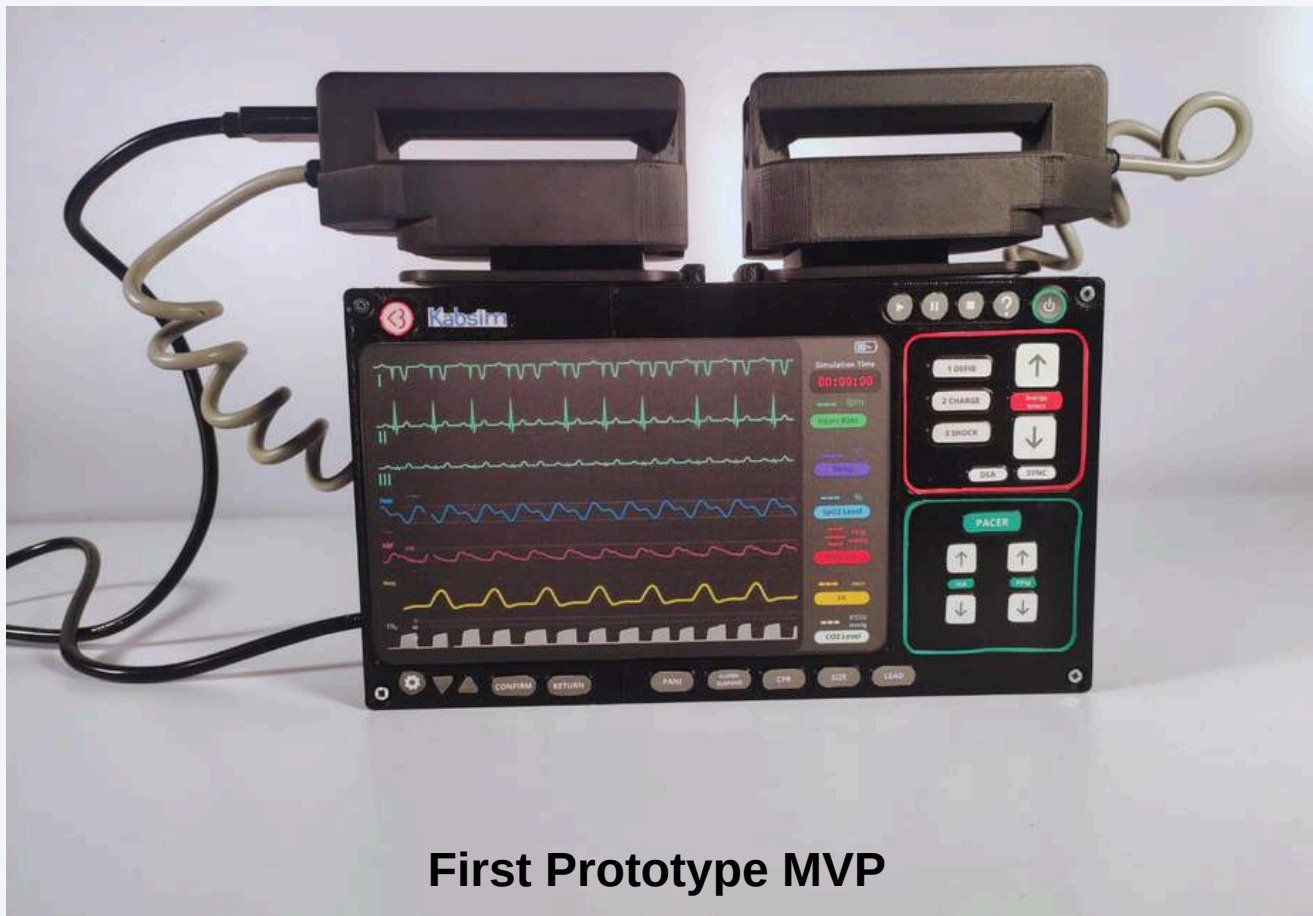
By providing customizable and varied emergency situations, it prepares users for real-world applications, significantly improving response skills and confidence.

This device reflects our commitment to advancing medical training technology.









Kabanta Companion App is a multi-platform application designed to enhance the training experience for Automated External Defibrillator (AED) use.

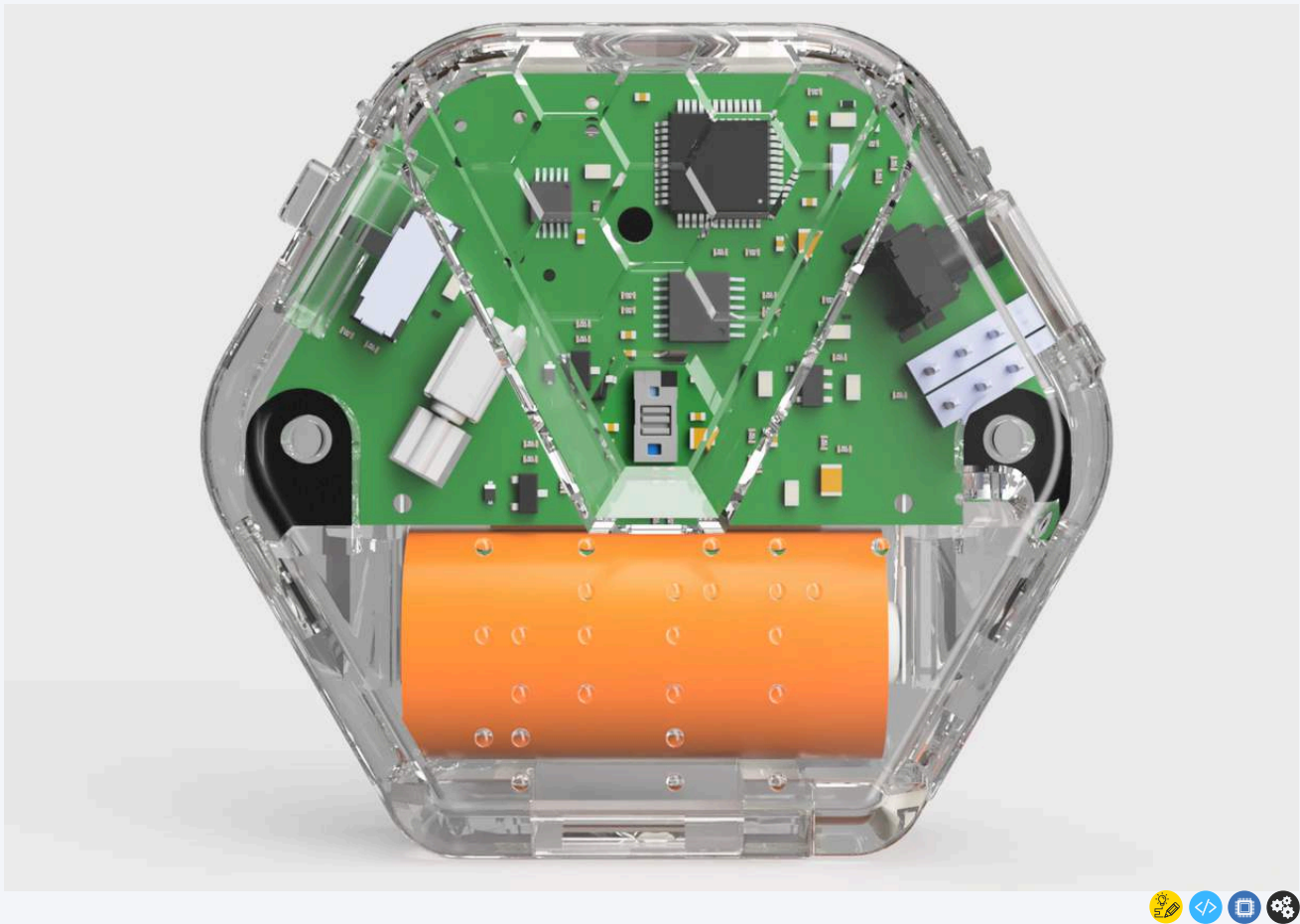
This app aims to provide instructors and trainees with a comprehensive, interactive, and customizable training tool. The app is compatible with various operating systems (iOS, Android, Web) ensuring wide accessibility.

The app is compatible with various operating systems (iOS, Android, Web) ensuring wide accessibility.



Emerging Consumer Electronics Brands

    Visual Aid Device
    Liquid dispenser



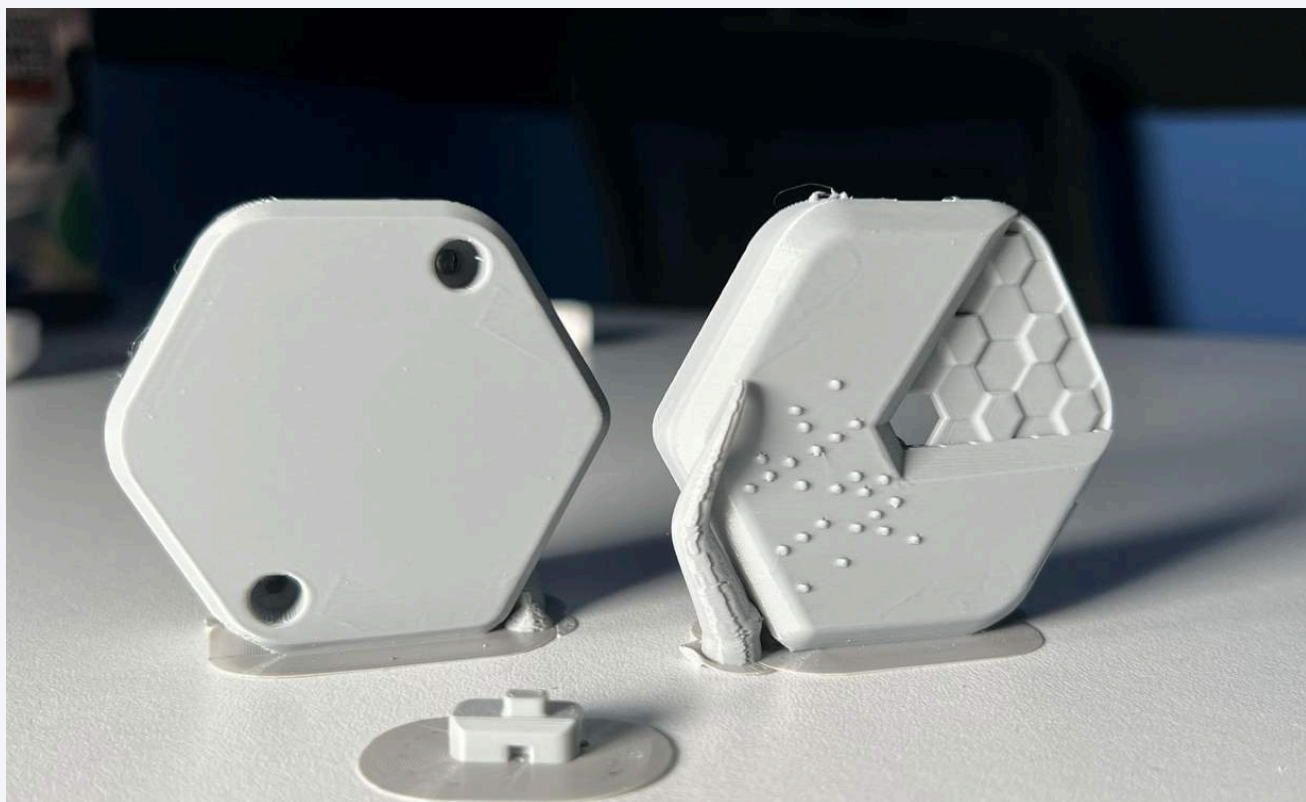
UltraWalk
AUGEM

500 Units
Design For Manufacture

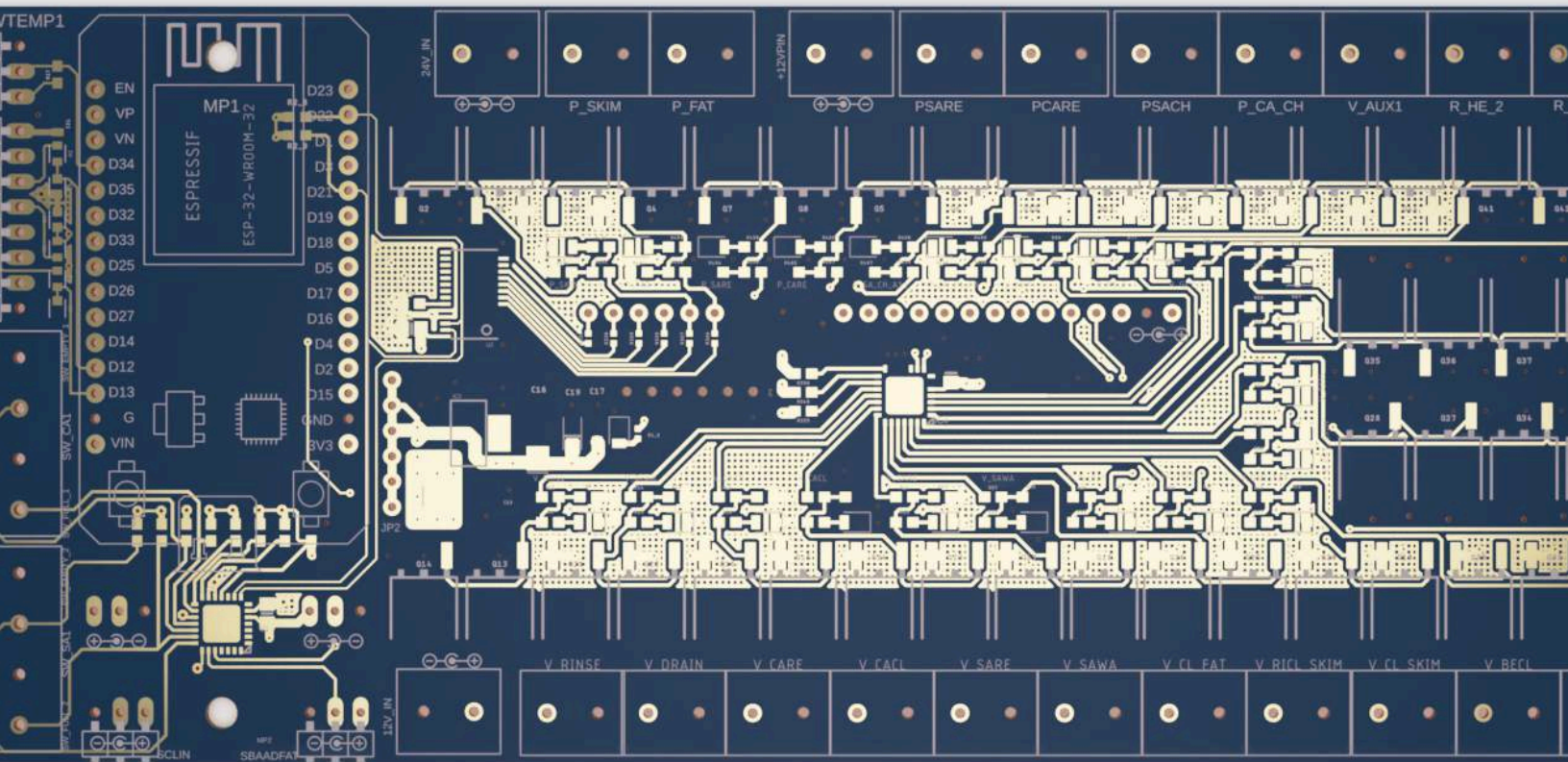
IA skilled assistant for the visually impaired, it detects obstacles, prevents accidents and helps with daily activities.

Ultrawalk is designed to be an assistant that allows you to detect obstacles at waist to head height, objects such as cables, branches, among many other things.

The solution created by Augem and the versatility of the design allow it to be used comfortably and leaving your hands free.



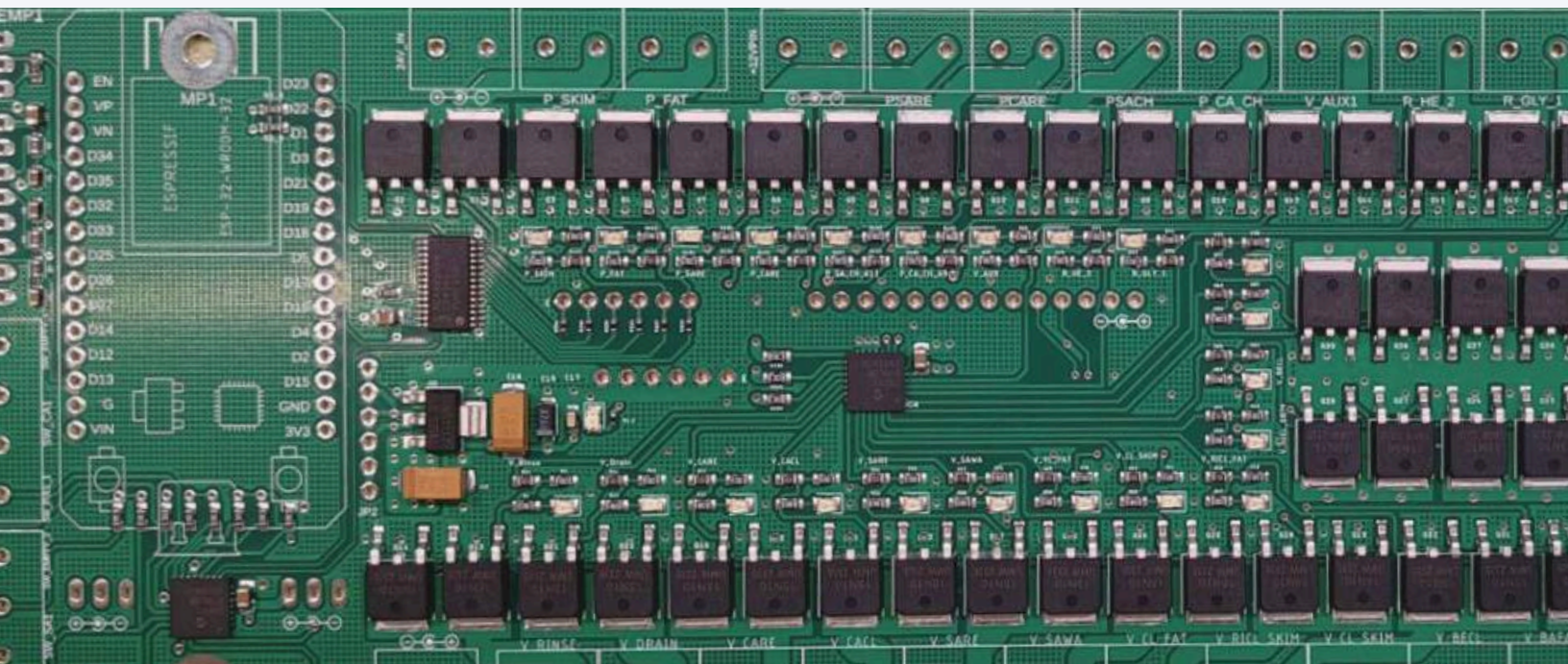




Liquid Dispenser

Prototype

Advanced liquid dispenser system capable of storing and dispensing multiple types of liquids with a single touch. A key feature of this system is its integrated self-cleaning mechanism, designed to prevent cross-contamination between different liquids



Sustainability -Focused Agro- Industrial Firms

    LP GAS IoT
   Medical device tracker



KenkoTracker
Soluciones Kenko

Device Management

Medical device tracker designed to enhance the security, maintenance, and overall management of medical equipment.

This tracker will utilize GPS technology for real-time location tracking to prevent theft and aid in recovery if stolen.

Additionally, it will monitor various operational variables to facilitate predictive maintenance.



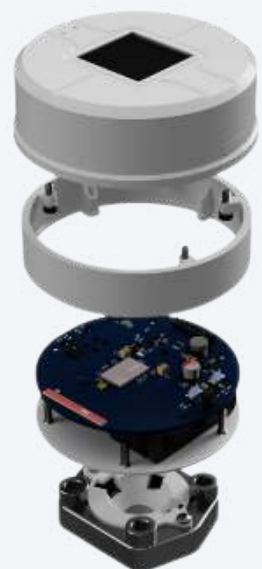


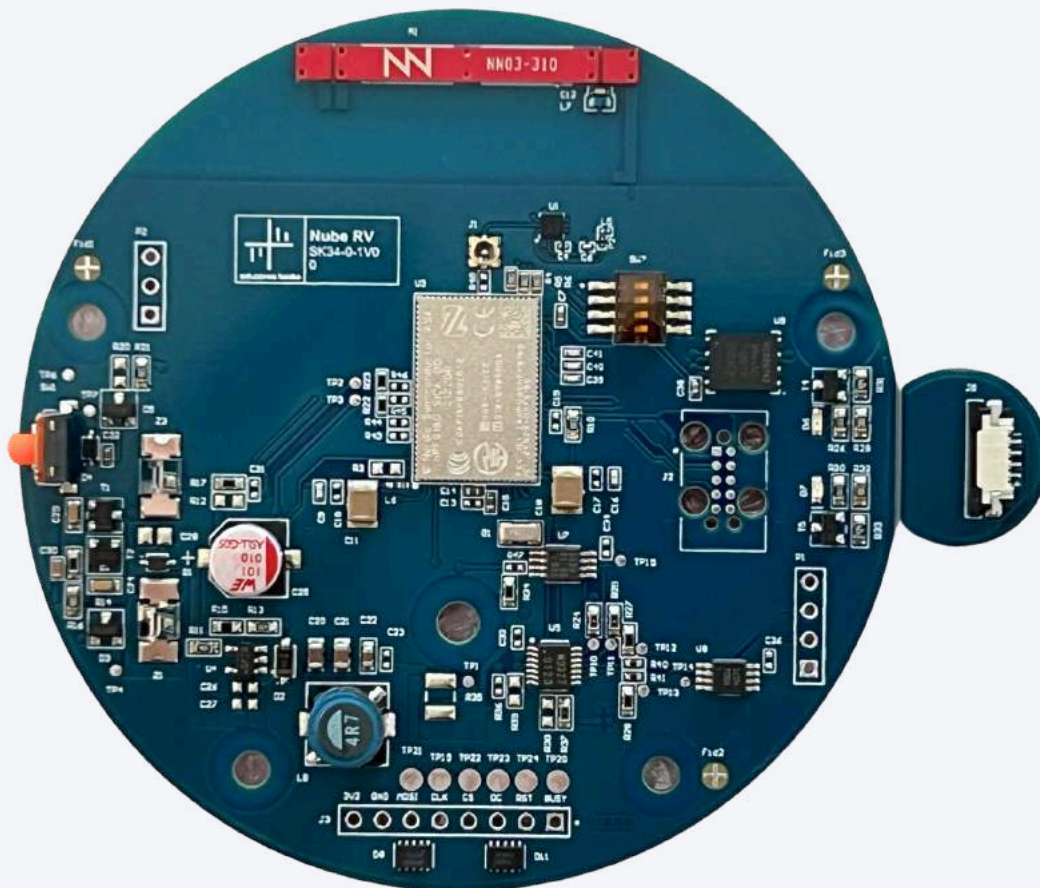
Round Version
Fource IoT

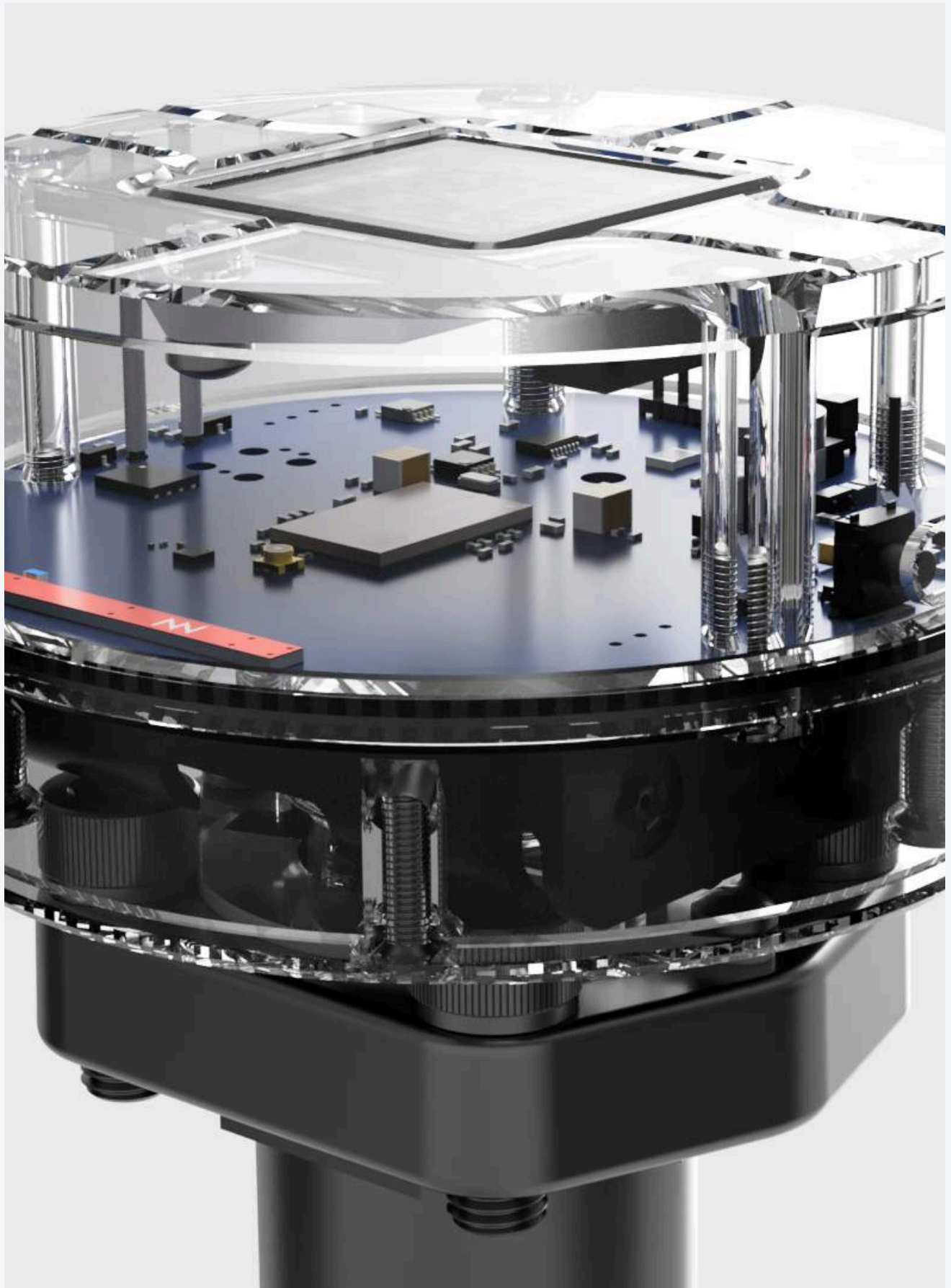
50 Units
Design For Manufacture

An IoT communication platform that focuses on the energy sector, particularly to gas. With the purpose of facilitating and optimizing processes for gas suppliers.

LET cellular connectivity
Nordic MCU
Zephyr







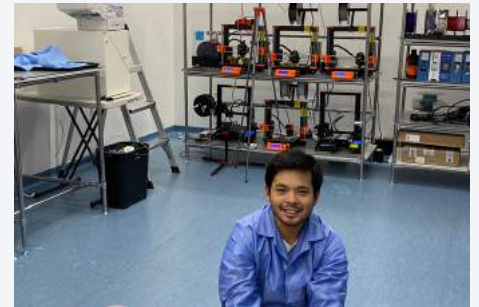
Design For Manufacture TEAM



Y Engineering Design team 2024

The following photos of the Y Engineering design team were taken in the late 2023

Yoku Sashida
Biomedical Engineer
CEO



Daniel Aragón
Biomedical Engineer
CIO



Snaider Bautista
Biomedical Engineer
VP of Engineer



Master Raúl Barragán
Electrical Engineer
Senior Hardware Designer



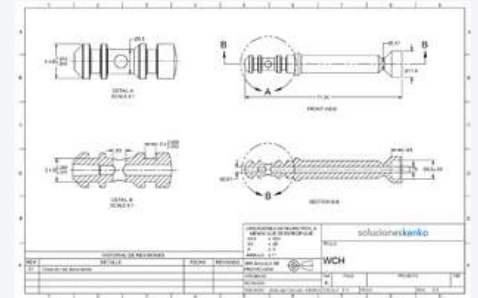
Adrian Cervantes
Biomedical Engineer
Hardware Department



Marco Ciau
Firmware Engineer
Firmware Department



Andrea Sotelo
Mechanical Engineer
Industrial Design



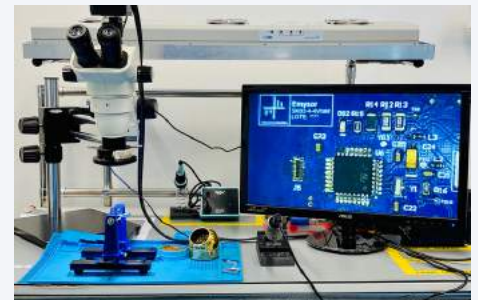
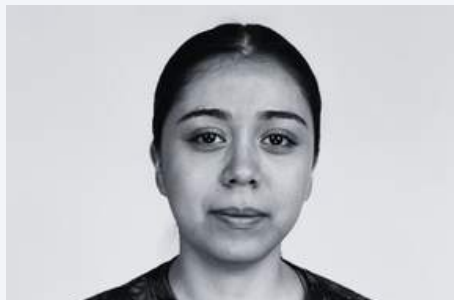
Frida Andrade
Biomedical Engineer
Firmware Department



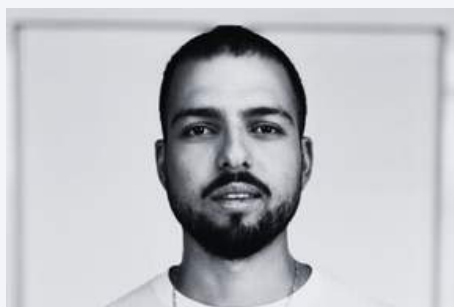
Salvador Carrera
Aeroespacial Engineer
Industrial and Mechanical
Department



Selene Madero
Electrical Engineer
Hardware Department



Emmanuel Arenas
Biomedical Engineer
Hardware Department



To our esteemed clients, your unwavering trust in Y Engineering has been the cornerstone of our success.

Each project you bring to us is a new adventure, a challenge to innovate and excel beyond conventional boundaries.

Your vision fuels our passion, driving us to deliver solutions that not only solve problems but also inspire change and progress.

The confidentiality of our work together, guarded by NDAs, reflects the cutting-edge nature of our collaborations and the pioneering spirit that characterizes your projects.

We are deeply grateful for the opportunity to be a part of your journey, to learn from your insights, and to grow alongside you.

Your success is our success, and we cherish the trust you place in us to bring your visionary ideas to life.

To our dedicated engineers, both past and present, who have journeyed with us from Soluciones Kenko to Y Engineering, your commitment and ingenuity have been the lifeblood of our operations.

The expertise and creativity you bring to every project do not just build solutions—they build the future.

Your hard work and dedication have not only propelled our company forward but have also contributed to shaping the industry.

We are immensely thankful for your contributions, your perseverance, and your unwavering commitment to excellence.

Together, we have tackled challenges, celebrated victories, and pushed the boundaries of what is possible.

Your talent and dedication are the foundation upon which Y Engineering stands proud today.

As we look to the future, we do so with a sense of excitement for the innovations yet to come, the challenges yet to be met, and the successes yet to be achieved.

To our clients and engineers, thank you for your trust, your partnership, and your excellence.

Here's to continuing our shared journey towards engineering a better tomorrow.

PORTFOLIO

2017-2024