SERVICES

- CUSTOMER CENTRIC SERVICES
- HARDWARE DESIGN PROCESS
- PRODUCT DEVELOPMENT
- TECH/ PRODUCTION CONSULTING

2020

WHO WE ARE

We are a passionate engineering team nestled in the heart of Thessaloniki, Greece.

Founded in 2020, Modihive is more than just a start-up team. We have helped numerous companies create devices and improve their product development pipeline.

Our **mission** is to breathe life into tech concepts through state-of-the-art prototype design and development.

WMF 2025 Bologna - Tech Exhibition

We stay humble to technological updates and work on our own product solutions

WHY MODIHIVE

We design and develop high-quality hardware and firmware solutions — **from concept to production.**

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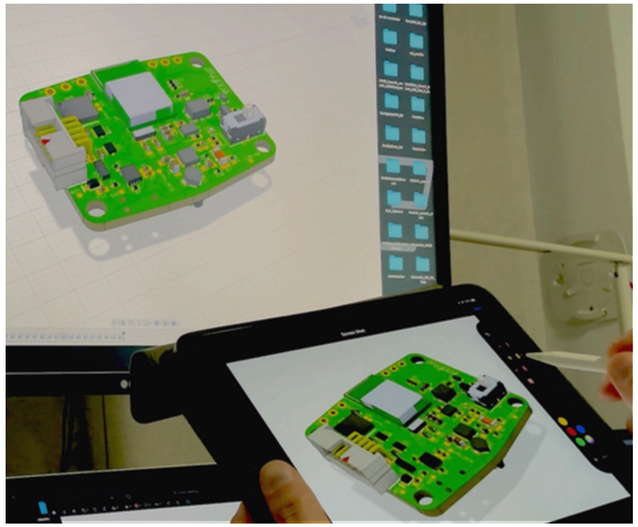
OUR MAIN SERVICES

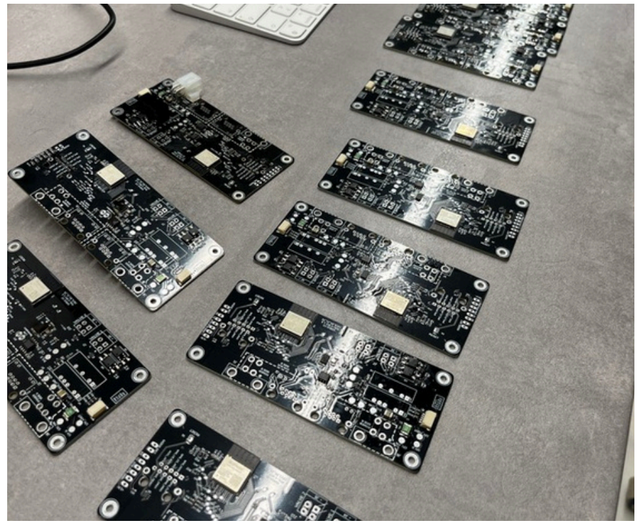


HARDWARE

Our expertise in rapid hardware prototyping lies in delivering highly customized solutions that meet niche client requirements, ensuring innovation, patentability, and cost-efficient scalability

FIRMWARE

We focus on testing and validation to ensure that we create robust, efficient, and reliable firmware applications tailored to specific hardware requirements



PRODUCTION

We undertake prototype development and continue into large-scale production using state-of-the-art technologies, streamlined processes, and the latest technological solutions — all aligned with international quality, safety, and regulatory standards

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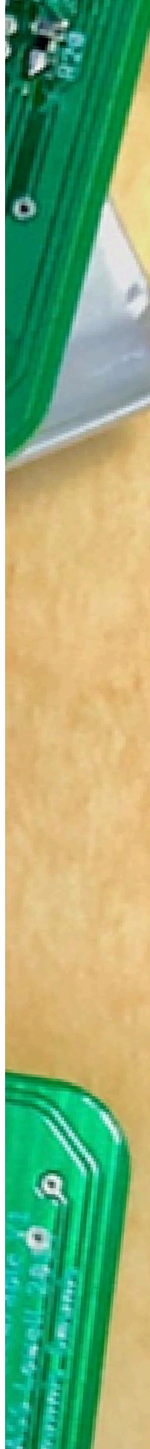
SECTORS WE SERVE

- Health
- Wearables
- Heavy Industry
- Sports & Athletics
- Agriculture



Health

THE BRADYGLOVE PROJECT

Device: Objective measurements and data collection for Parkinson's symptoms.

Purpose: The BradyGlove can eliminate Parkinson symptoms, bradykinesia and tremor by tracking the patients' hand motion patterns and produce results that are compliant with UPDRS scale.

Benefits:

- Objective and precise measurements
- Remote and real-time patient monitoring
- Meaningful data for doctors
- Precise drug dosage means less side effects
- Extention and better quality of life for patients
- No need for frequent visits to doctor

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Health

THE EPILYPSY PROJECT

Device: Robotically controlled kinetic like sleeping device, able to deliver assistance to patients with epilepsy.

Purpose:

- Designed primarily to reduce the risk of sudden unexpected death in epilepsy (SUDEP).
- Reacts immediately to seizures during sleep by adjusting the patient's position.
- Functions as a sleeping monitoring and decision-making system during scissors situations.

Benefits:

- Non-Invasive intervention during epileptic seizures at night.
- Reduces dependency on caregivers by offering autonomous monitoring.
- Ideal not only for epilepsy patients but also for those with mobility issues or need for repositioning.
- Provides comprehensive body monitoring through advanced robotic technology.

Health

SMART SPIROMETER

Device: Smart Spirometer for Asthma Monitoring.

Key Features & Benefits:

- Made for Asthma & COPD patients.
- Smartphone-attached via Lightning connector (no batteries needed).
- Web-enabled for remote monitoring & data sharing.
- Ease of use – simple operation, no manual required.
- Disposable mouthpieces compatible with 3rd-party options.
- Durable design with no mechanical parts.
- Unique, patentable airflow technology ensuring accurate results.
- Low-cost, portable solution empowering patients with real-time lung function insight and early condition management.

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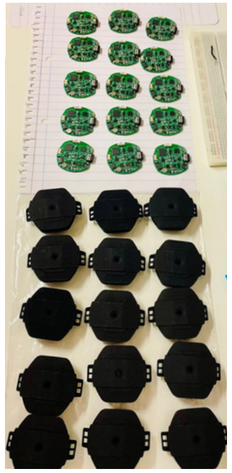
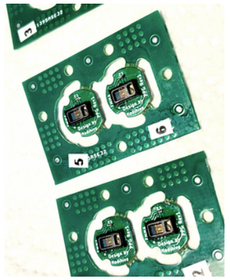
THE COVID-19 PROJECT





Device: Low cost wearable device as a replacement of the usual Patient ID wristband during hospital admission.

Purpose: Continuous health tracking (Respiratory rate, Heart rate, SpO_2, Body Temperature) and real-time emergency alerts during hospitalization.

Benefits:

- **Data Processing:** Automatically transmits patient data to a clinical platform for real-time analysis and monitoring.
- **Alerts:** Provides early warnings of possible patient deterioration to support timely intervention.
- **Target Users:** Primarily for patients with medium-level severity cases.

HEALTH ARMBAND

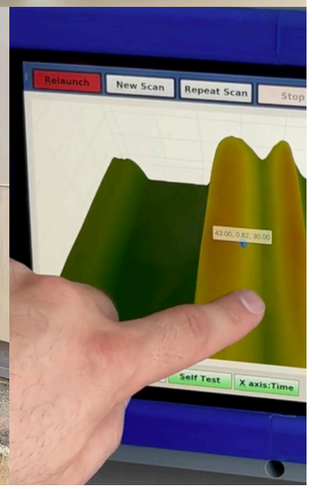
Device: Wearable Health Monitor device for biosignal measurements, enables live health tracking remotely over WiFi connectivity.

Key Features & Benefits:

- **Continuous monitoring** → Designed for hospitals & clinical settings.
- **Vital signs tracked** → Heart Rate, Respiration, ECG, SpO_2, Blood Pressure, Body Temp, Motion.
- **Connectivity & autonomy** → WiFi-enabled, 25h recording (6Ah Li-Po battery).
- **Integrated design** → Wrist manometer, USB charging, ECG electrodes.
- **Clinical value** → Real-time remote monitoring & emergency alerts for improved patient safety.

Heavy Industry

THE SECURE PROJECT



Device: Non-Destructive Testing (NDT) Flaw Detector.

Purpose: The device is an Eddy Current based Flaw Detector designed for evaluating metal welds and bonds in gas pipes. It employs electromagnetic induction to detect surface and near-surface defects, such as cracks, corrosion, or inclusions, without damaging the material.

Benefits:

Safety: Detects defects early without risk or shutdown
Cost Efficiency: Reduces repair and testing downtime expenses
Asset Management: Extends pipe lifespan via predictive maintenance
Accuracy: Provides detailed, reliable data on defects
Environment: Prevents leaks and emissions
Compliance: Fulfills inspection and safety regulations
Technology: Enables smart monitoring and automation

Heavy Industry

MOCK-UP

Device: Production line mocking device for training a Computer Vision AI-based model.

Purpose: Optimizing the processes of the production line, including unique characteristics, scanning barcodes, separating odd products and controlling the speed and versatility of different lines.

Benefits:

- Enables the company to showcase its own automation technology integrated into the production line.
- Supports the training of an AI-based sensor system that adapts to belt speed and direction under user supervision.

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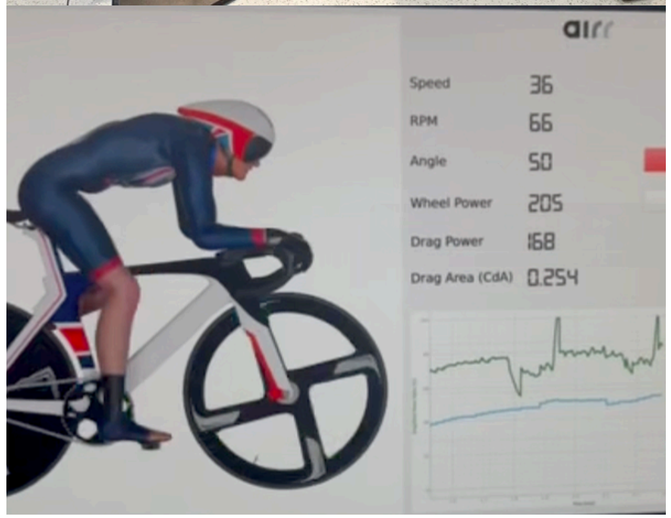
Sports & Athletics



Device: Indoor Cycling System, Simulator for outdoor conditions in cycling (especially air resistance) in indoor training.

Purpose: Brings outdoor realism indoors by integrating aerodynamics, resistance, and rider posture.

Training Modes:

- Analog Mode (dynamic resistance on smart trainer)
- ERG Mode (accurate speed simulation)

Outcome: Immersive cycling experience that closely replicates real-world conditions

Sports & Athletics

SUSPENSIONS DAQ

Device: Data acquisition device for mountain bikes suspensions system.

Purpose: Data collection device for mountain bike suspensions, designed mainly for manufacturers to improve performance & durability of their products.

Functionality: Records real-world data such as air pressure changes, vibrations, orientation, location, fork travel, and speed.

Outcome: Enables precise suspension analysis, helps identify weaknesses, supports better design, and enhances rider experience on rough terrains

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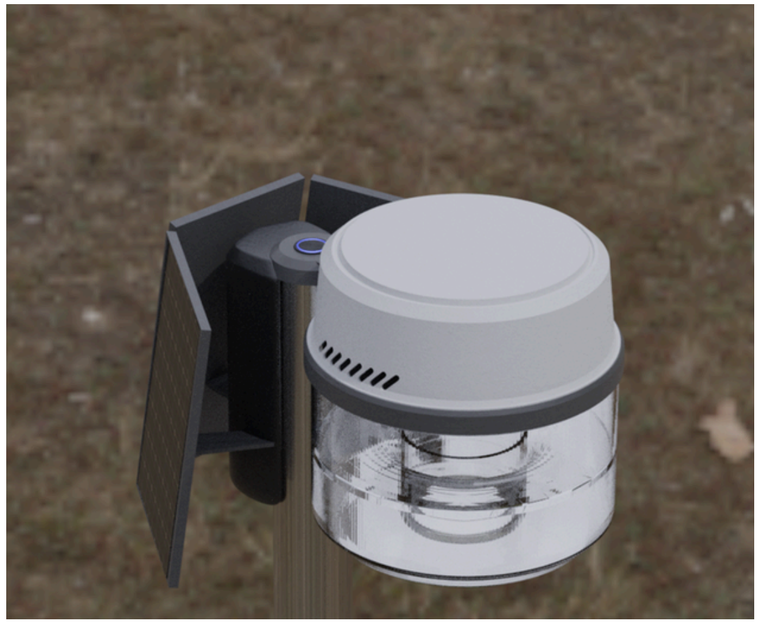
FLY TRAP

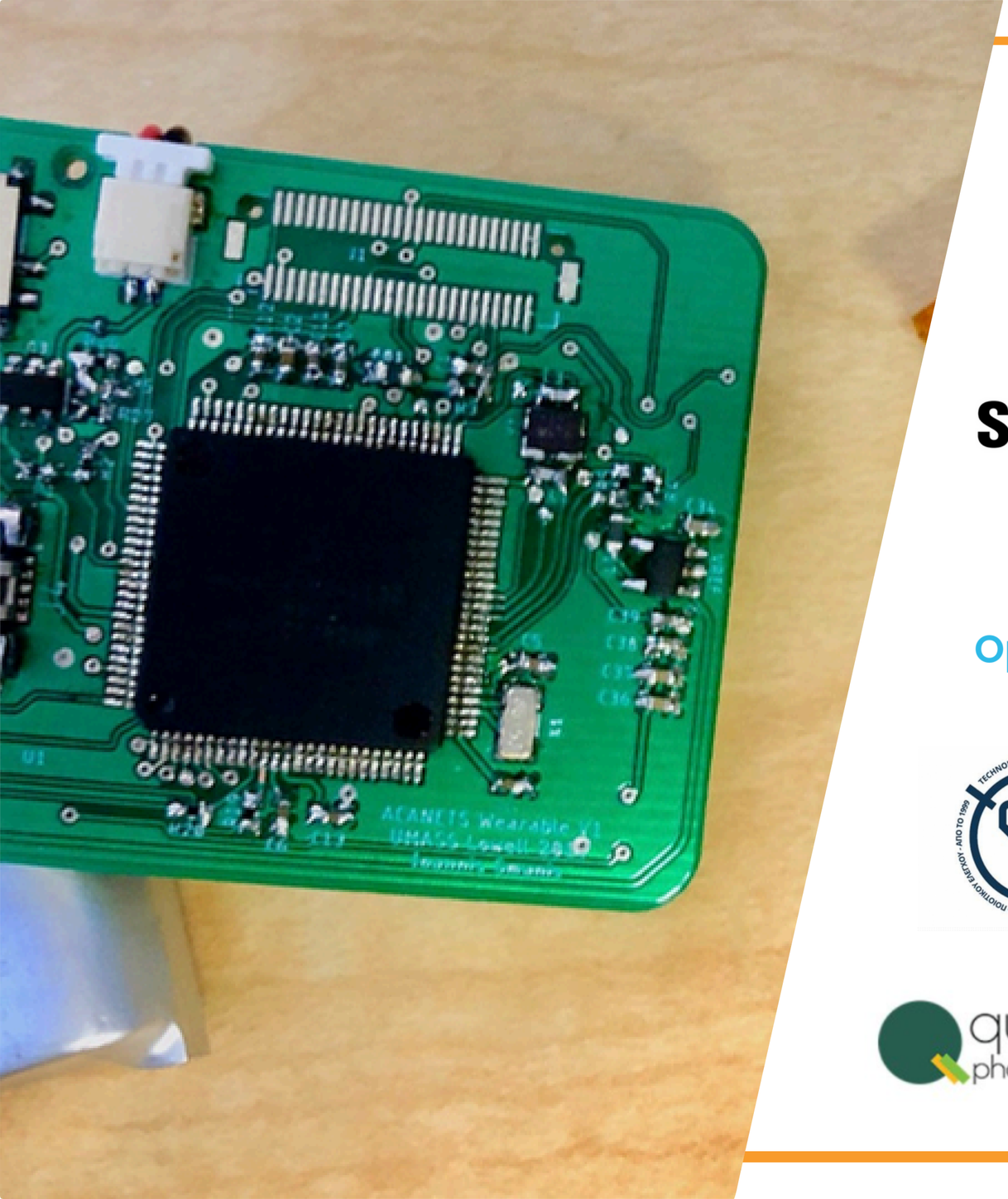


Device: High-tech smart trap for inscects in crops

Purpose: Innovative solution for olive fly control and improved crop yield, combining traditional methods with advanced technology.

Benefits:

- High-tech smart trap (Attalos_FlyTrap) with cameras & computing for real-time insect monitoring and analysis.
- Enables targeted interventions, reduces costs & environmental impact, boosts production quality and quantity, and promotes sustainable agriculture.



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Let's create a piece of valuable tech!

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