

wrlds



## PLATFORM FOR CREATING SMART CONNECTED SOLUTIONS

A Comprehensive Whitepaper on  
Unlocking the Power of IoT and Machine  
Learning with Wrlds Technologies.

WRITTEN BY

[wrlds.com](http://wrlds.com)

# ABSTRACT

*The Wrlds IoT platform provides a modular approach to developing and deploying innovative, connected devices. Our platform offers tools and services that enable businesses to quickly and easily create custom hardware and software solutions for their specific needs without requiring extensive technical expertise. With our embedded software, service apps, cloud software, and integrations, customers can reduce development time and costs while still achieving the desired level of functionality and performance. Wrlds also offers support for hardware development, including electronics and mechanics. Our platform supports a wide range of motion sensors and devices, and we prioritize data security and privacy in all stages of development.*

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# EXECUTIVE SUMMARY

This whitepaper provides an overview of Wrlds Technologies' IoT platform, which specializes in advanced data analysis through machine learning. The platform offers a comprehensive ecosystem of resources to help businesses connect their products, add intelligence and gamification, and capture valuable sensor data. With an emphasis on sporting goods manufacturers, health tech, and

other companies, Wrlds empowers businesses to enhance their product experiences with digital capabilities. Through our AI Toolbox, SDKs, and communications protocol, we enable companies to make the most out of their IoT systems and transform their analog products into intelligent, connected solutions.



## INTRODUCTION

Wrlds Technologies is a company that specializes in providing an IoT platform for advanced data analysis, leveraging the power of machine learning. Our platform is designed to help businesses harness the power of sensors to gain deeper insights into their products and services. We primarily cater to sporting goods manufacturers, health tech, and other companies looking to enhance their product experiences with digital capabilities.

Our platform offers a comprehensive ecosystem of resources that enable businesses to connect their products, add intelligence and gamification, and capture data from sensors such as 9-axis motion sensors. We provide all the necessary software modules to create and run an IoT system, offering a complete solution for a company's IoT needs.

Wrlds' AI Toolbox is an app-based system that allows users to record sensor data and test machine learning models. This ensures that businesses can maximize the benefits of their IoT systems in terms of user experiences and actionable data.

Our SDKs, including our communications protocol, empower developers to create user interfaces that communicate with sensor hardware, fostering an ecosystem of applications that work seamlessly with their products.

The value of IoT lies not only in data capture but also in analyzing that data to uncover patterns and insights undetectable by human senses alone. Wrlds provides the technical solution, enabling companies to transform their analog products into intelligent, connected devices, ultimately bringing digital abilities to their product portfolios.

Investing in Wrlds means investing in the future of IoT and machine learning, as we have the platform to turn ideas into reality for intelligent products.

## PURPOSE OF THE WHITEPAPER

This whitepaper aims to provide a comprehensive overview of the Wrlds IoT platform and its potential benefits for businesses seeking to enhance their analog product portfolios. We aim to demonstrate the value of adopting IoT technology for improved user experiences, data-driven decision-making, and

overall business growth. Furthermore, this whitepaper serves as a guide to help businesses understand how Wrlds can support them in their digital transformation journey, ensuring a seamless and risk-free integration of IoT into their product offerings.



## SCOPE AND TARGET AUDIENCE

This whitepaper offers an in-depth exploration of the Wrlds IoT platform, its features, and the benefits it can bring to businesses looking to enhance their analog products with smart and connected capabilities. We provide a comprehensive understanding of how our platform can be tailored to suit companies' specific needs and requirements across various industries, including sporting goods manufacturers, health tech, and more. Our target audience includes decision-makers and developers

at potential customer companies responsible for driving innovation and exploring new technologies to enrich their product offerings. This whitepaper aims to provide valuable insights and practical guidance for these key stakeholders, helping them make informed decisions about integrating IoT technology into their products and understanding the transformative impact Wrlds can have on their business operations and user experiences.

# BENEFITS OF ADDING SMART AND CONNECTED CAPABILITIES TO EXISTING PRODUCTS

In this digital era, companies must constantly innovate to stay ahead of the competition. Adding smart and connected capabilities to existing products is essential for any business that seeks to optimize its products, improve user experiences, and maintain a competitive edge in the market. By investing in an IoT platform like Wrlds, companies can experience a wide range of benefits.

## ENHANCED PRODUCT VALUE

Integrating IoT capabilities into existing products allows companies to offer improved features and functionality, thereby increasing the overall value of their offerings. By providing customers with the convenience, data, and insights they desire, companies can build products that seamlessly integrate with users' digital lifestyles, making them more attractive to potential customers.

## IMPROVED USER EXPERIENCE

Incorporating connectivity and sensors into analog products enhances the overall user experience by providing real-time feedback, tailored recommendations, and personalization options. These features create a more engaging, interactive, and user-friendly experience, increasing customer satisfaction and loyalty.

## ENHANCED SECURITY AND SAFETY

IoT-enabled products offer improved security and safety features like real-time monitoring, notifications, and remote access control. These features contribute to a safer user experience and help companies comply with industry regulations and standards.

## INCREASED EFFICIENCY AND COST SAVINGS

Leveraging IoT and machine learning technologies allows companies to optimize their products and processes, increasing efficiency and cost savings. Smart and connected products enable businesses to streamline operations and reduce costs through predictive maintenance, inventory management, and resource allocation.

## DATA-DRIVEN DECISION MAKING

IoT-enabled products collect valuable data about user behavior, preferences, and interactions, allowing companies to make informed decisions based on actual usage patterns. This data-driven approach enables businesses to optimize product designs, identify new product development and innovation opportunities, and streamline their decision-making processes.

## SCALABILITY AND FLEXIBILITY

IoT platforms, like the one offered by Wrlds, enable seamless integration and expansion, allowing companies to scale their products and services according to market demand. The modular nature of IoT technology ensures flexibility, making it easier for companies to adapt to changing industry trends and customer expectations.

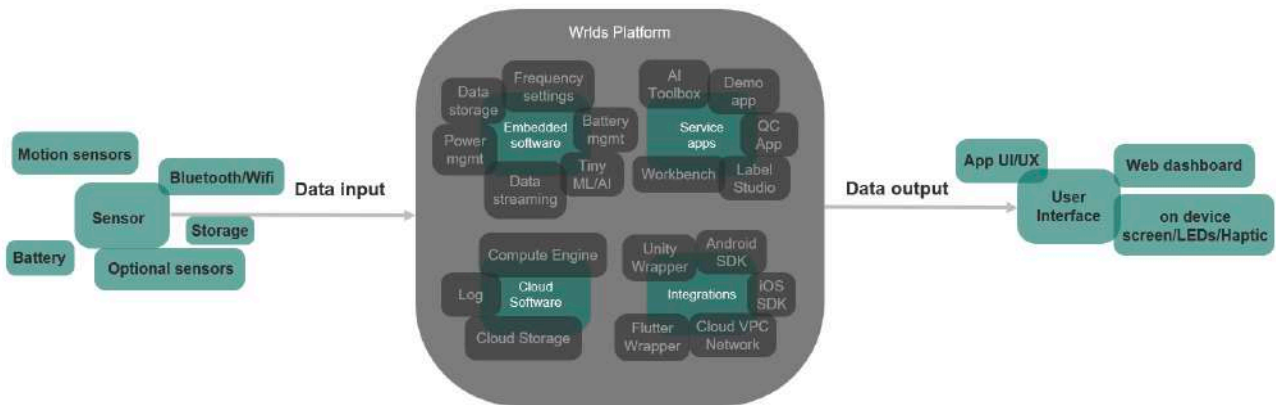
## COMPETITIVE ADVANTAGE

Businesses that embrace IoT technology and integrate it into their products are more likely to maintain a competitive edge in the marketplace. By offering innovative and cutting-edge solutions, these companies can attract new customers, retain existing ones, and foster long-term growth.

# IOT PLATFORM OVERVIEW

Wrlds' IoT platform offers a modular and curated approach to smart device development. Its suite of platform modules, including embedded software, service apps, cloud software, and integrations, can be combined to reduce development time and costs

while achieving desired functionality and performance. Wrlds uses sensor-agnostic hardware to utilize a wide range of sensors from different brands. Data security and privacy are highly prioritized in product development.



# PLATFORM ARCHITECTURE

The technology involved in smart devices is characterized by a complex chain of technologies that need to work seamlessly together all the way from hardware, through software on device, software on cloud, AI/ML and software covering the user interface. Wrlds software platform consists of all the main tools needed to quickly deploy hardware

that can communicate through various interfaces thanks to a curated and modular approach to each link in the chain. As with a restaurant menu, the best modules can be picked out for each individual project allowing for fast and stable integration through all steps.

# PLATFORM APPLICATION

Platform modules can be utilized independently or in combination, depending on a customer's specific needs. Each module is designed to solve a specific challenge in the development and deployment of smart, connected products. By leveraging the modules that are most relevant to their use case, customers can reduce development time and costs, while still achieving the desired level of functionality and performance.

- **Embedded software:** Wrlds embedded software allows for creating of small, power-efficient electronic devices that can perform a wide range of tasks. This can be applied to products such as wearables, health monitors, and smart home devices, which can gather and analyze data to provide insights and improve
- **Service apps:** With its suite of service apps, Wrlds offers solutions that help businesses improve productivity and efficiency. The AI Toolbox, for example, can be used to collect data for machine learning models, while Wrlds QC can help streamline the hardware testing process. The Demo app can showcase motion AI in action, while Label Studio enables collaborative annotation and labeling of data.
- **Cloud software:** By utilizing state of the art services, Wrlds can offer secure hosting, device management, and analytics to businesses. This can be applied to a wide range of industries, such as healthcare, finance, and retail, where data security and analysis are crucial for success.
- **Integrations:** Wrlds integrations allow for seamless communication between hardware and software interfaces, enabling businesses to create a unified user experience across devices.



# FEATURES AND COMPONENTS OVERVIEW

Embedded software – this is the software that operates the electronics. It is characterized by being small in size to minimize the need for storage and battery consumption. The main structure is set by the firmware code that is handling all the core features on the device. Wrlds firmware library includes all relevant services needed for battery management, button configurations, storage, LED controls and sensor support. The firmware also manages the communication procedures whether we use Bluetooth, WiFi or SIM-cards. Finally, when AI/ML is required to run on device, this module too is included in the firmware package.

Service apps – Wrlds have developed a set of apps to facilitate all parts of development.

- **AI Toolbox** - allowing anyone to record data using standard hardware. The AI Toolbox is connected to the standard hardware using Bluetooth and records video data in combination with motion sensor data. AI Toolbox is wrlds' full-fledged data app that is used for collection of data and testing machine learning models. The app is available for both Android and iOS. The data package is then uploaded to Wrlds cloud where AI engineers transform the data into algorithms.
- **Wrlds Playground** – a development app allowing Wrlds internal developer team to quickly test new features and demonstrate proof of concepts to customers.
- **Wrlds QC** – an app developed specifically for factory workers helping them test all vital parts of hardware before it is shipped and register the hardware to Wrlds cloud for future device management.
- **Label studio** – A collaborative web-based application used by Wrlds AI team to label and annotate data from the AI Toolbox. The app is highly scalable and deployed using Kubernetes technology.
- **Demo app** – marketing tool aimed at demonstrating motion AI in action. The app can be connected with standard hardware, identify various motion events and illustrate the sensor data feed in realtime.

Cloud software – Wrlds uses Google Cloud as the backend of the platform. The cloud is used for everything from secure hosting, AI/ML modelling, device management and analytics.

Integrations – With integrations we refer to the bridge between Wrlds hardware/software configurations to the various interfaces used by customers. Different products require different integrations with the most common being mobile apps and web dashboards. External interface developers can access data using either mobile native SDKs, Flutter and Unity wrappers, direct firmware services or cloud APIs.



## SUPPORTED MOTION SENSORS AND DEVICES

All products developed by, or with, Wrlds depend on hardware that feeds data from the physical world. Projects always start off using Wrlds standard hardware as a means to test, verify and get started with development. This includes a 4x2x1 cm PCB using nRF52832 BLE, a Bosch 9-axis motion sensor, LED indication lights, button, USB-C charging and a 100 mAh soft pack battery.

As projects move on, custom hardware is developed based on the specific use case in each project. The component library supporting this part currently stands at over 100 different key components and continues to expand as new sensors reach the market and customers require unique solutions.

Wrlds has chosen a sensor agnostic approach in the development of the platform allowing us to use a wide range of sensors from different brands. Decisions are made in each individual case based on the required quality, cost and performance of each product. Thanks to a modular approach and the use of development boards, new products can be developed, tested and verified at low cost and with fast turnaround.

## DATA SECURITY AND PRIVACY CONSIDERATIONS

Development of new products is always done with a high emphasis on data security and privacy. Wrlds uses state of the art cloud services with security added by design. Hardware is developed with the same mindset and is never used to collect personal data. Thanks to focusing on the physical products and the software required to run these in a safe and stable environment, Wrlds rarely sees or manages any sensitive user data as this is managed in the interface layer which is wholly owned by the customer.

## HARDWARE DEVELOPMENT PROCESS

Developing high-quality hardware is a critical component of Wrlds' end-to-end IoT solutions. Our hardware development process is designed to ensure that each device meets the highest standards of quality and reliability, while also providing the necessary functionality and features required by our customers. This process begins with an analysis and specification phase, where we evaluate and choose key components based on the customer's needs. We then move on to PCB design and sampling, followed by a test run and certification phase, where we print 100 devices in a factory environment and distribute them to relevant stakeholders for testing. Finally, we oversee mass production and post-production maintenance through cloud services, ensuring that any inconsistencies or quality errors are identified and addressed promptly.

## HARDWARE OVERVIEW AND DEFINITION

With hardware, we refer primarily to electronics including battery, PCBA and electronic components such as sensors and chips used for communication. Wrlds also assist customers with development of mechanics such as plastic enclosures when required and rely on close partners for this part.

## HARDWARE ANALYSIS AND SPECIFICATION

The first step of development consists in evaluating, choosing and testing all key components based on customer needs. In this phase Wrlds rely on a combination of our standard hardware and development kits in order to quickly get to the next step.

## PCB DESIGN AND SAMPLING

The second step consists of designing the printed circuit board including all components typically leading to the first few hand soldered samples. The samples are tested thoroughly for quality as well as together with the relevant software with the aim of identifying any inconsistency and reducing the need for changes before proceeding to mass production.

## MASS PRODUCTION AND POST-PRODUCTION MAINTENANCE

As the products are ready to be sent to the market, WrlDs hand over all relevant production contacts to the customer, thus formally closing the development cycle. WrlDs continue to oversee the hardware through cloud services to identify inconsistencies, quality errors, produced batches and relevant device analytics on behalf of the customer.

## TEST RUN AND CERTIFICATION

The last step before mass production includes printing 100 devices in factory environment including going through the QC process. The devices are distributed to certification agency, customer, test users and other relevant stakeholders.



# MACHINE LEARNING PIPELINE AND AI ALGORITHMS

At Wrlds Technologies, our platform's machine learning pipeline and AI algorithms are at the forefront of our innovative approach. Our pipeline starts with data collection and progresses through labelling, preprocessing and feature extraction, model development and training, model evaluation and optimization, and deployment. We believe in continued improvement, so feedback is always taken into account to achieve even better performance. In this section, we'll take a closer look at our machine learning pipeline and AI algorithms and how they drive our platform's cutting-edge capabilities.



## DATA COLLECTION

Data collection is a critical part of any machine learning project, as the quality and quantity of the data can significantly impact the performance of the model. At Wrlds, we have developed specific applications for data collection that allow us to collect relevant data in a structured and organized way. This ensures that we have a sufficient amount of high-quality data to train our machine learning models.

## LABELLING

Once the data has been collected, it needs to be processed and organized in a way that the machine learning model can understand. This is where labelling comes in. Labelling involves assigning descriptive tags or metadata to each piece of data, so that the model can identify patterns and make predictions based on that data. For example, if we are training a model to recognize different types of physical activity, we might label each data point with the corresponding activity (e.g., walking, running, jumping, etc.). This labelled data is then used to train the machine learning model, so that it can recognize patterns and make accurate predictions based on new, unseen data.

## MODEL EVALUATION AND OPTIMIZATION

A subset of the dataset is always reserved for the purpose of evaluating the performance of the model. Based on the results of the evaluation, some optimization techniques and parameter tuning can be done to boost the performance slightly more.

## PREPROCESSING AND FEATURE EXTRACTION

Preprocessing and feature extraction are critical steps in the machine learning pipeline, allowing us to effectively learn from collected and labeled data. We start by cleaning the data to remove noise and irrelevant information, followed by identifying the most important features for the given task. Depending on the project, we prefer to use statistical features extracted from raw data, enabling us to identify patterns and trends not visible to the human eye.

By carefully selecting and extracting relevant features, we ensure our machine learning models learn from the most important aspects of the data, generating accurate predictions and insights.

## DEPLOYMENT AND CONTINUOUS IMPROVEMENT

After we have made sure the models perform reasonably well, we push them out for deployment through our model registry and cloud services which are the received and processed by our SDKs present on end-user/testing devices. We value continued improvement; therefore, the feedback is always taken into the development process after a model has been deployed to achieve an even better performance.

# SDKS AND INTEGRATION

The Wrlds Technologies SDK provides developers with a powerful tool to create mobile apps that work seamlessly with Wrlds hardware. With its easy-to-use API, Bluetooth connectivity, data parsing, and machine learning capabilities, our SDK is an ideal choice for businesses looking to create innovative apps that leverage Wrlds hardware. In this section, we'll take a closer look at the core features of our SDK, the programming languages and platforms it supports, and its compatibility with third-party systems and services.

## SDK OVERVIEW AND CAPABILITIES

The Wrlds Technologies SDK is a powerful tool that makes it easy for developers to create mobile apps that work seamlessly with Wrlds hardware. Whether you're creating a fitness app that tracks workouts or a smart home app that controls lighting and temperature, our SDK provides a simple and easy-to-use high-level API that abstracts away the complexities of working with hardware and BLE specifications.

### OUR SDK'S CORE FEATURES INCLUDE:

- **Bluetooth Connectivity:** Our SDK simplifies the process of working with Wrlds Bluetooth devices by providing a simple API to connect to Wrlds hardware, control it, send commands, stream data, and perform DFU (Device Firmware Update) over Bluetooth. With the SDK, developers don't need to have deep knowledge of Wrlds hardware or BLE specifications to get started.
- **Data Parsing:** Our SDK handles parsing the data received from the Wrlds device, ensuring that it is presented in a usable format. This means that developers can focus on building their app's core functionality, without worrying about data processing and formatting.
- **Machine Learning (ML) Capabilities:** Our SDK provides an easy-to-use API for starting ML classification and event detection. It handles all the preprocessing of the data and feeds it to an ML model, returning the results of the ML classification or event detection in an easy-to-use format. Additionally, the SDK has functionality to download new ML models from the cloud, allowing developers to keep their app's ML capabilities up-to-date without the need for manual updates.

With the Wrlds Technologies SDK, developers can create engaging and interactive mobile apps that seamlessly integrate with Wrlds hardware. Our SDK's easy-to-use API, Bluetooth connectivity, data parsing, and ML capabilities make it an ideal choice for businesses looking to create innovative apps that leverage Wrlds hardware.

# SUPPORTED PROGRAMMING LANGUAGES AND PLATFORMS

The Wrlds Technologies SDK supports a wide range of programming languages and platforms, making it easy for developers to create mobile apps that work seamlessly with Wrlds hardware. Our SDK is currently available for Android and iOS platforms, with ML capabilities still in development for iOS.

## PROGRAMMING LANGUAGES AND PLATFORMS SUPPORTED BY OUR SDK:

- **Android:** Our SDK is developed in Kotlin, which is a modern and powerful programming language that is widely used for Android app development. The SDK is compatible with both Jetpack Compose and XML projects, making it easy to integrate into existing Android projects.
- **iOS:** Our SDK is developed in Swift, which is a fast and efficient programming language that is widely used for iOS app development. Although ML capabilities are still in development for iOS, our SDK already provides Bluetooth connectivity and data parsing features for iOS app development.
- **Flutter:** For cross-platform development with Flutter, we can provide plugins that allow developers to use our SDK in their Flutter projects. This means that developers can create apps that work seamlessly across multiple platforms, including Android, iOS, and web.

Our SDK's support for multiple programming languages and platforms makes it an ideal choice for businesses looking to create mobile apps that work seamlessly with Wrlds hardware. Whether you're an Android or iOS developer, our SDK provides a simple and easy-to-use API that abstracts away the complexities of working with hardware and BLE specifications. And if you're looking for cross-platform development, our Flutter plugins make it easy to create apps that work seamlessly across multiple platforms.

## INTEGRATION WITH THIRD-PARTY SYSTEMS AND SERVICES

To integrate the Wrlds Technologies SDK into your project, you simply need to add it as a dependency. We will provide you with a build file that can be easily imported as an external library to your project. Our SDK is highly compatible with third-party systems and services, and our team is available to provide support and assistance with integration.

# APPLICATIONS AND USE CASES

Wrlds IoT platform offers a wide range of applications across various industries, enabling businesses to leverage the power of IoT and machine learning to gain valuable insights and improve their operations. Here are some examples of how Wrlds platform is being used to transform industries and create innovative solutions for a variety of use cases.

## SPORTS AND FITNESS ANALYTICS

By incorporating IoT sensors and machine learning algorithms, sports and fitness equipment can provide athletes with real-time data on their performance, such as speed, acceleration, and technique analysis. This data helps users optimize their workouts, monitor progress, and achieve better results. For example, a connected basketball equipped with motion sensors could provide data on shot accuracy, ball spin, and shot arc, allowing players to refine their skills.

## HEALTH AND ELDERLY MONITORING (SUCH AS FALL DETECTION)

Smart wearables and IoT-enabled devices can play a significant role in monitoring the health of elderly individuals or patients. For instance, a wearable device equipped with motion sensors can detect sudden movements or falls, triggering an alert to caregivers or emergency services. This can improve the quality of care, enhance safety, and provide peace of mind for both users and their families.

## TRANSPORTATION AND LOGISTICS

IoT devices and machine learning can improve transportation and logistics by providing real-time data on the location, condition, and status of vehicles or assets. This information can help optimize routing, minimize downtime, and reduce operational costs. For example, a fleet of delivery trucks equipped with IoT sensors could transmit data on fuel efficiency, maintenance needs, and route optimization, leading to more efficient operations.

## OTHER INNOVATIVE APPLICATIONS

There are many relevant scenarios for the implementation of IoT technology. Some examples that Wrlds is working on are:

**Smart Uniforms:** IoT-enabled uniforms for emergency responders, such as firefighters or police officers, can provide vital information on their health and safety, including heart rate, body temperature, and GPS location, which can help command centers make better-informed decisions.

**Dog Health:** IoT-enabled pet wearables can monitor a dog's health, activity levels, and location, providing owners with insights into their pet's well-being and ensuring their safety.

# **BENEFITS FOR BUSINESSES**

Implementing IoT technology and connectivity into a business's product strategy can offer significant benefits across various industries. From improved decision-making to enhanced operational efficiency, IoT provides valuable insights that can help businesses streamline operations, reduce costs, and create new revenue streams. Here are some of the key benefits that businesses can gain from implementing IoT and connectivity into their products, using Wrlds as an example of a versatile IoT platform that offers scalability and adaptability.

## **IMPROVED DECISION-MAKING THROUGH DATA-DRIVEN INSIGHTS**

IoT technology allows businesses to collect and analyze valuable data, which can be used to make informed decisions, identify trends, and uncover hidden patterns. This data-driven approach can help businesses optimize operations, target new market opportunities, and adapt to changing customer needs.

## **COMPETITIVE ADVANTAGE AND DIFFERENTIATION**

Implementing IoT technology in products can help businesses differentiate themselves from their competitors by offering innovative, connected solutions that enhance the user experience and provide added value.

## **SCALABILITY AND ADAPTABILITY**

IoT platforms like Wrlds are designed for scalability and adaptability, allowing businesses to grow and evolve their IoT implementations as needed, responding to market trends and customer demands.

## **NEW REVENUE STREAMS AND BUSINESS MODELS**

IoT technology can enable businesses to create new revenue streams by offering value-added services or data-driven insights to their customers. For example, a sports equipment manufacturer can offer a subscription-based platform that provides users with personalized training programs and performance analytics.

## **ENHANCED OPERATIONAL EFFICIENCY AND COST SAVINGS**

By leveraging IoT and machine learning, businesses can streamline their operations, identify inefficiencies, and reduce costs. Examples include predictive maintenance for equipment, real-time monitoring of inventory levels, and optimizing energy consumption in buildings.

## CASE STUDY

The BERG Toys Airhive is the first product to roll out of production utilizing Wrlds IoT platform to its full potential. With several other products in the process of implementation and soon to be announced, Wrlds is helping BERG Toys revolutionize the trampoline jumping experience with cutting-edge IoT technology and machine learning algorithms.

### BERG TOYS AIRHIVE

#### - A TRAMPOLINE JUMP TRACKER BUILT ON WRLDS IOT PLATFORM

The BERG Toys Airhive is a groundbreaking innovation that uses Wrlds IoT platform to bring a new dimension to trampoline jumping. With a 9-axis sensor for motion tracking and machine learning algorithms that identify over 20 acrobatic tricks, the Airhive offers a unique and exciting way to enjoy trampolining.



## TECHNICAL IMPLEMENTATION

The Airhive runs on Wrlds IoT platform, utilizing its advanced capabilities in motion tracking, machine learning, and data aggregation. The 9-axis sensor in the Airhive captures motion data in real-time, which is then processed and analyzed using machine learning algorithms built on Wrlds AI toolbox. The algorithms can identify over 20 different acrobatic tricks, including backflips, front flips, and twists.

The Airhive app, built on Wrlds platform, offers a range of features, including games, challenges, community functionality, and a personal training assistant to help users improve their skills. The app utilizes the data gathered from the Airhive sensors to provide accurate and actionable feedback to users, helping them to land new tricks and achieve their jumping goals.

## CUSTOMER INSIGHTS

As Airhive users register to use the app, the data they generate provides valuable insights into user behavior and levels of satisfaction. BERG Toys can use this data to improve their products and gain a deeper understanding of their customers' needs and preferences.

The BERG Toys Airhive is a testament to the power and versatility of Wrlds IoT platform, demonstrating its ability to deliver innovative solutions that enhance the customer experience and provide valuable insights for businesses.

*"We are extremely proud to be able to present the most groundbreaking innovation since the first trampoline was invented. The Airhive, built on Wrlds IoT platform, has enabled us to take trampolining to the next level and provide a unique and engaging experience for our customers." (Roëll Wiedijk, Product Manager at BERG Toys).*



## FUTURE ROADMAP AND VISION

As we quickly move towards a future of more smart products and customers that are more technically mature we focus on two main enhancements of the platform.

### MORE MODULARITY FOR EVEN FASTER DEVELOPMENT CYCLES

Over the past years we have reduced the time needed to develop a product from years to months. With even more parts of the platform turned into modules we believe this can come down to days, allowing us to configure a complete project while workshoping with a customer and ending the

session with a build that performs according to the specs. This also opens up for more possibilities for external developers to create their solutions directly on the platform without the need for hands-on support.

### UNSUPERVISED AI THAT CAPTURES "ANYTHING"

With the development of better and smarter AI progressing faster than ever we are developing tools that allow us to deploy algorithms without the need to pass the steps of recording data and defining exactly what we want to capture. In the next few

years we will be able to update algorithms on the fly based on realtime data providing both customers and end-users with increasing flexibility to create tailor-made use cases for each individual user.



## CONCLUSION

Wrlds Technologies offers a powerful and versatile IoT platform that enables businesses to leverage the power of IoT and machine learning to gain valuable insights, streamline operations, and create innovative solutions. By providing a simple and easy-to-use API, Wrlds makes it easy for developers to integrate IoT and connectivity into their products and create engaging experiences for their customers. With a wide range of applications across various industries, Wrlds is helping businesses to transform their operations, gain a competitive advantage, and drive innovation. Experience the power of Wrlds Technologies and discover the future of IoT today.

**STOCKHOLM**  
**APRIL 25, 2023**

For more information about Wrlds Technologies, visit [www.wrlds.com](http://www.wrlds.com)

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