nesten

THE WIRELESS NETWORK
BUILT BY YOU

Redefining the Boundaries of Your Communication

Mission

Nesten's mission is to initiate and foster a paradigm shift in wireless communications by deploying "community-based" network operations built on the integration of advanced wireless solutions and multi-layer blockchain technologies.
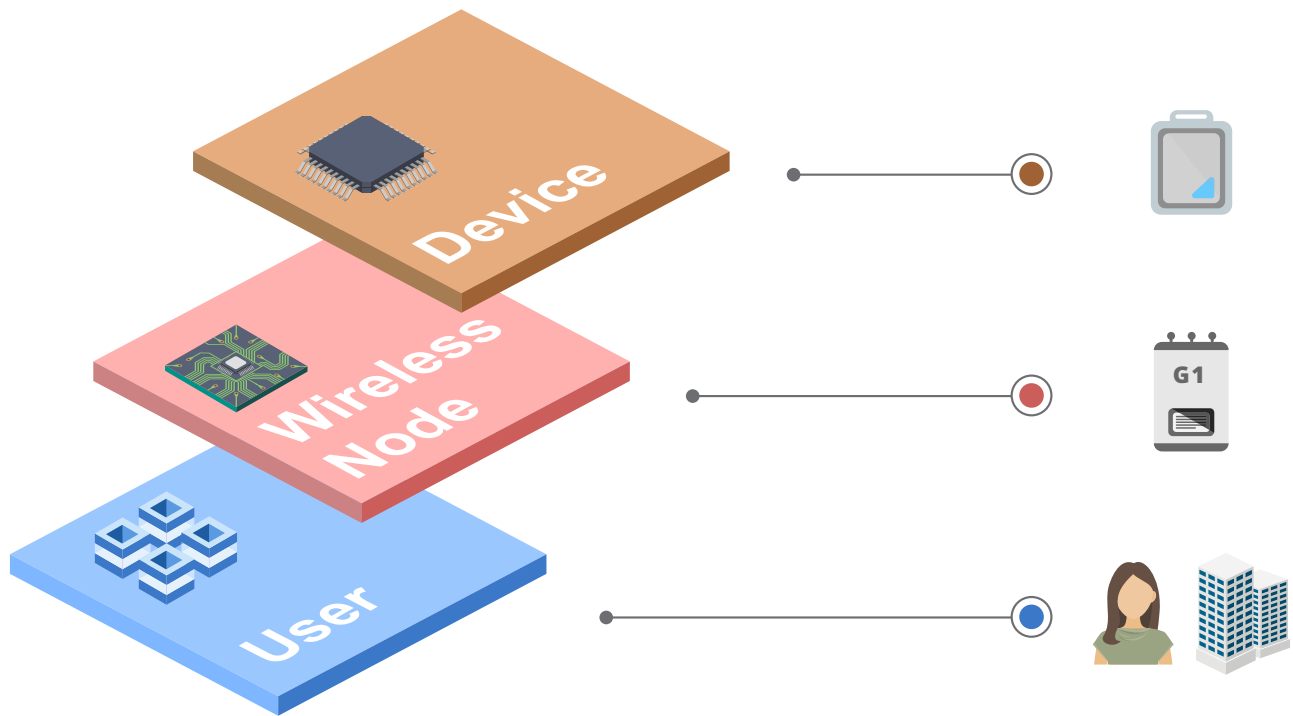
Value

Nesten seeks to empower its participants by establishing a democratic IoT infrastructure founded on three essential values.

• Community-based network
• Data Ownership
• Technology of blockchain, IoT communication and AI

Multi-Layer Blockchain

Each individual layer is designed with unique characteristics to address specific challenges. The device layer is capable of handling authentication for a massive number of devices. The node layer is the backbone of the Nesten network with its expansive availability and reliability, while the user layer focuses on the financial integrity of the system.

- Broad array of system components, each with unique characteristics
- Sophisticated, scalable blockchain system for powerful data security
- Cryptographic key pairing system for complete and perpetual data ownership

IoT Communications

Nesten's IoT (Internet of Things) communication technology is uniquely positioned to address the market demands and challenges of building a broad-reaching, reliable network that facilitates the secure and efficient generation, transmission, and trading of vast amounts of data.

• Wide area wireless
• High precision indoor location
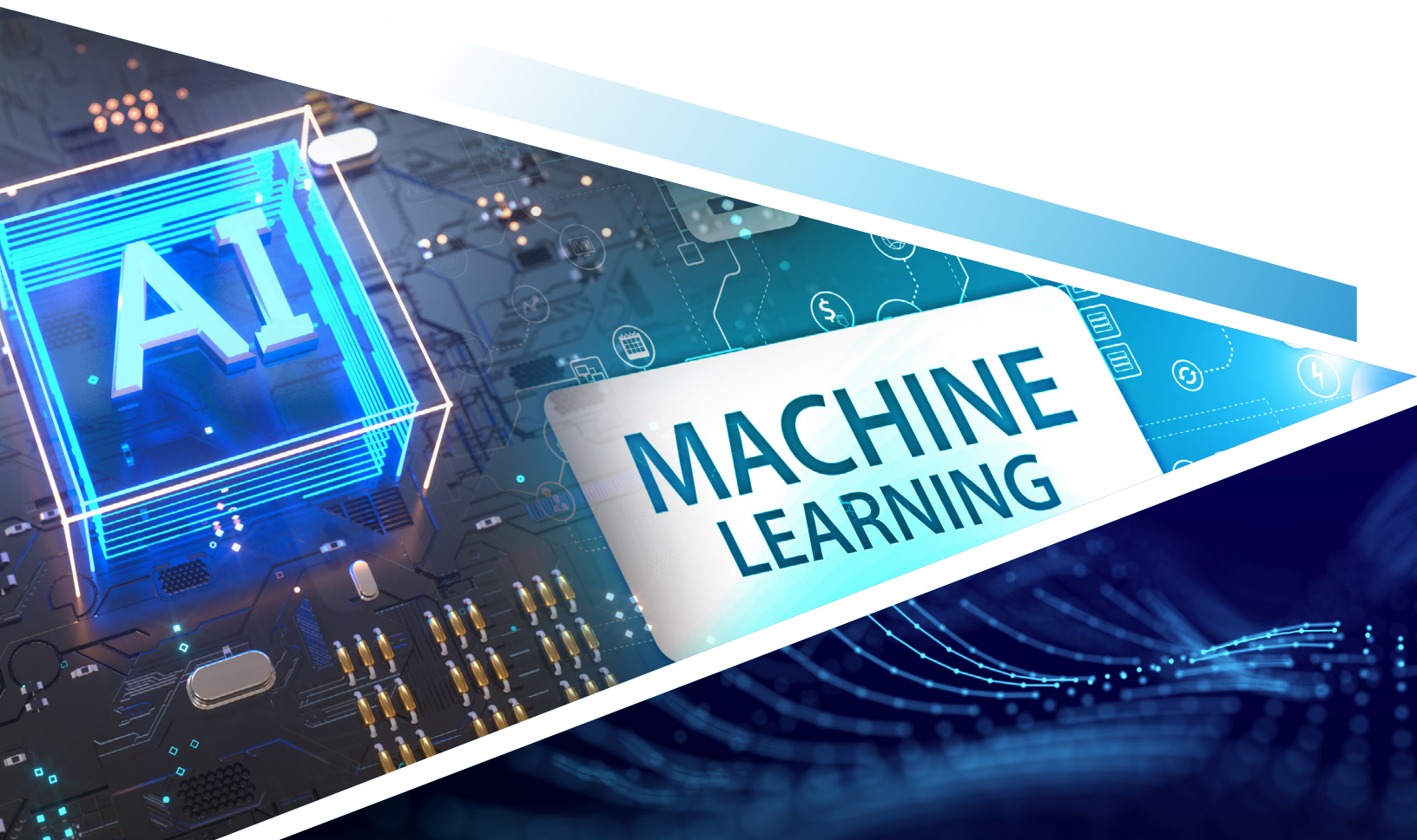• Support for multiple wireless protocols

Machine Learning & Artificial Intelligence

Machine Learning

Nesten ML is focused on metadata extraction and event detection in real time. The metadata extraction minimizes system and storage overheads in the blockchain infrastructure, while the event detection facilitates an effective, efficient response to timing critical situations.

Artificial Intelligence

Nesten AI combines ML-extracted metadata and events with domain expertise and heuristics to influence higher decision making processes. It is ultimately designed to mimic the cognitive function of human intelligence in addressing specific, targeted domain needs.
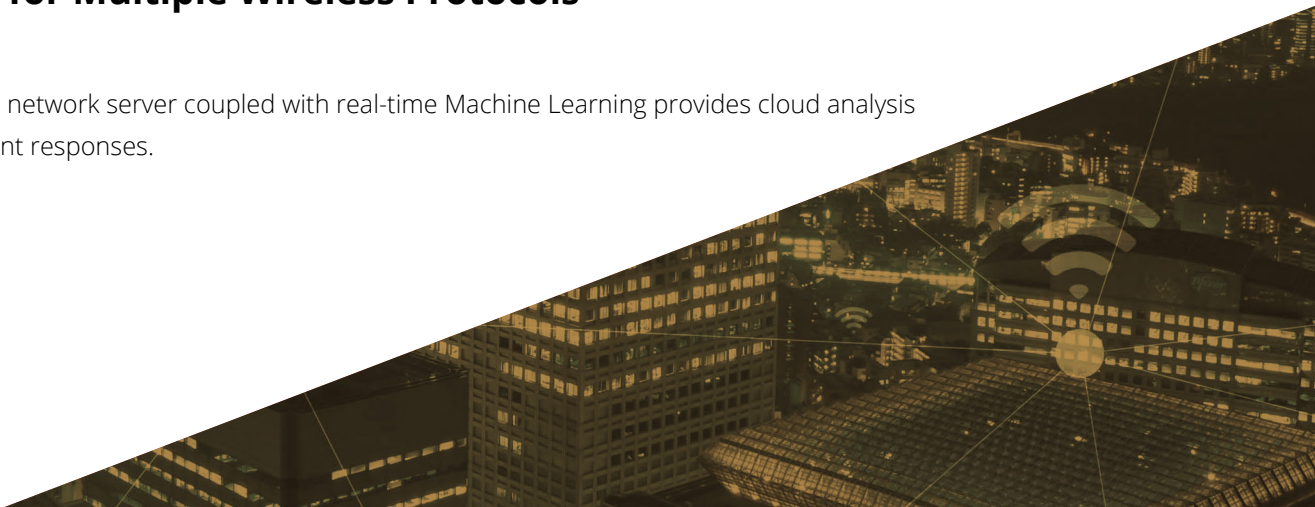
G1 Wireless Node

UWB · **LoRa** · **Wi Fi** · Bluetooth · **GPS**

- **Powered by Nesten Blockchain**

- **Multicore ARM Processor**

- **Expansive Solid Stage Storage: 128 GB**

- **Support for Multiple Wireless Protocols**

Fully integrated network server coupled with real-time Machine Learning provides cloud analysis and instant event responses.
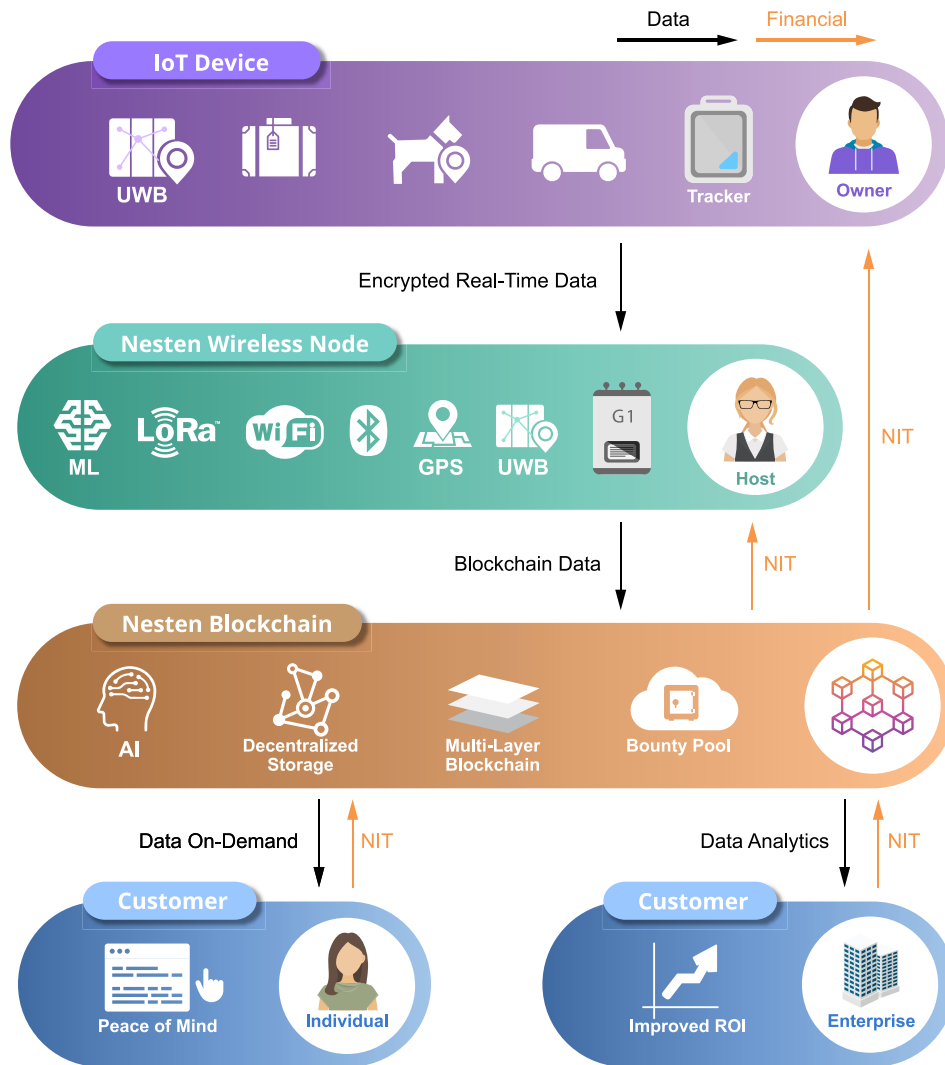
T1 Tracker

- **Powered by Nesten Blockchain**
- **Ready for Nesten PoC Verification**
- **LoRa and BLE Compatible**
- **6-axis Motion Sensing**
- **GNSS and WiFi for Geolocation**
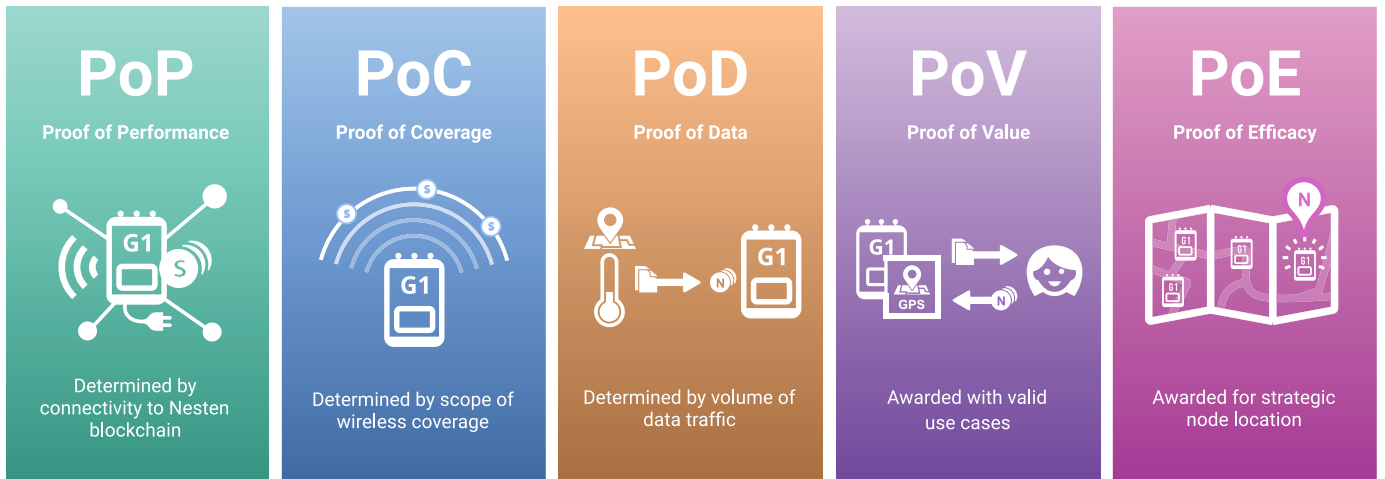- **Waterproof with Wireless Power**

Expands use cases with multiple wireless protocols for connecting devices and services. Collects, aggregates, and secures data for critical event detection.
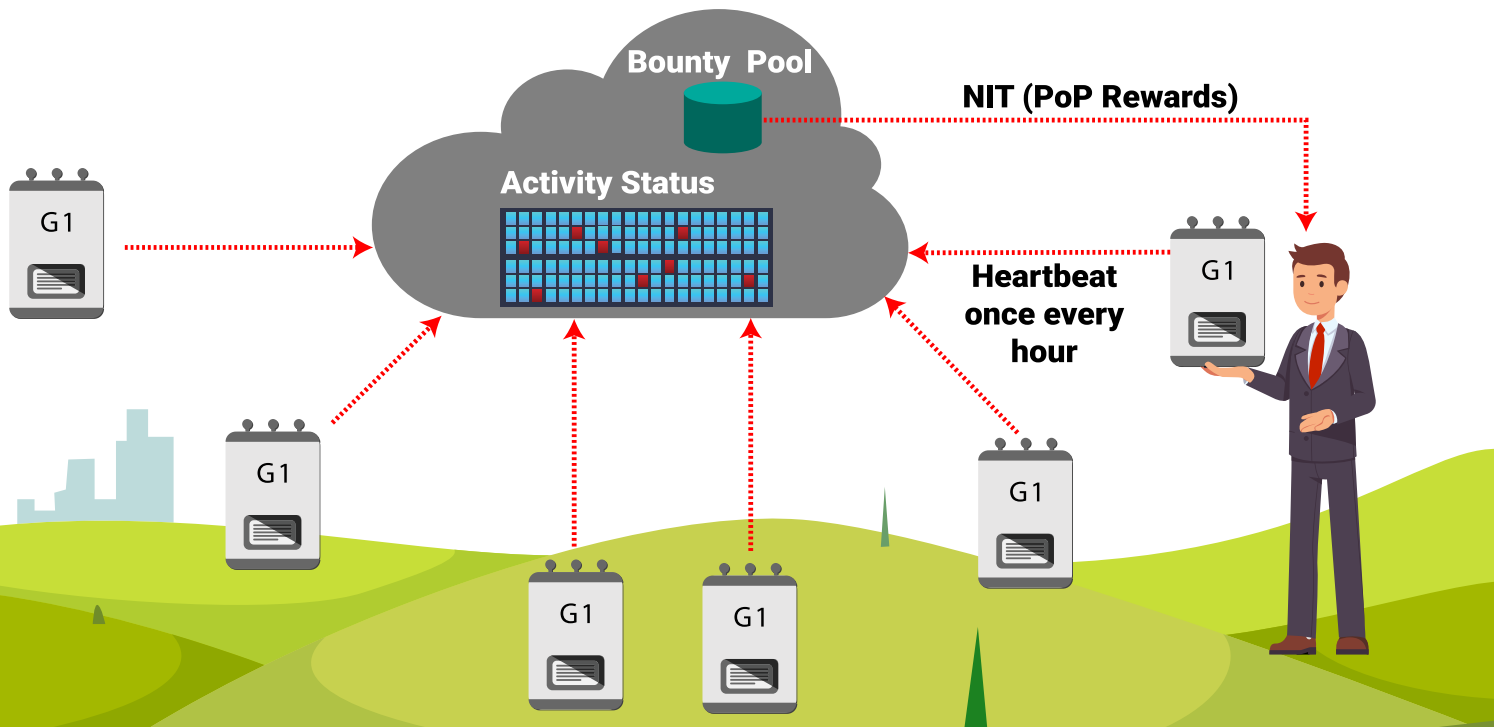
Data & Finance Flow

As cities, communities, and homes become increasingly "smarter," the need for perpetual, dependable, and affordable IoT coverage becomes increasingly paramount. Nesten's wireless network—built by you—harnesses the power and capacity of individuals to provide reliable, energy-efficient coverage and services for a massive number of devices at a fraction of the cost of traditional service providers.

Simply put, Nesten's ecosystem is the future of IoT, and this future begins with you.

5 Types of Reward

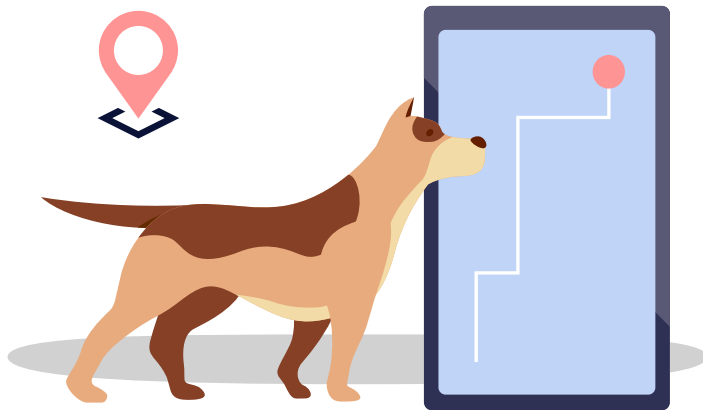| PoP	PoC	PoD	PoV	PoE
Proof of Performance	**Proof of Coverage**	**Proof of Data**	**Proof of Value**	**Proof of Efficacy**
Determined by connectivity to Nesten blockchain	Determined by scope of wireless coverage	Determined by volume of data traffic	Awarded with valid use cases	Awarded for strategic node location

Since you—the device owner—are the one providing the desired resources and services in a data-driven economy, you should reap the benefits. Nesten's proof system ensures your contributions to the network are rewarded with fairness and transparency. Now, instead of telecom carriers trying to recoup their expenses and capitalize on their network, you make it possible for financial resources to stay within the Nesten community, where they benefit everyone."

Proof of Performance (PoP)

Pet Tracking / Senior Care
(LoRaWAN+GPS+WiFi)

Pet Tracking

Senior Care

Nesten's tracking system enables you to track and monitor the health, safety, and location—both indoor and outdoor—of your loved ones by combining three state-of-the-art technologies: LoRaWAN, GPS, and WiFi. Event detection alerts you to occurrences such as emergencies or activity outside of a designated radius.
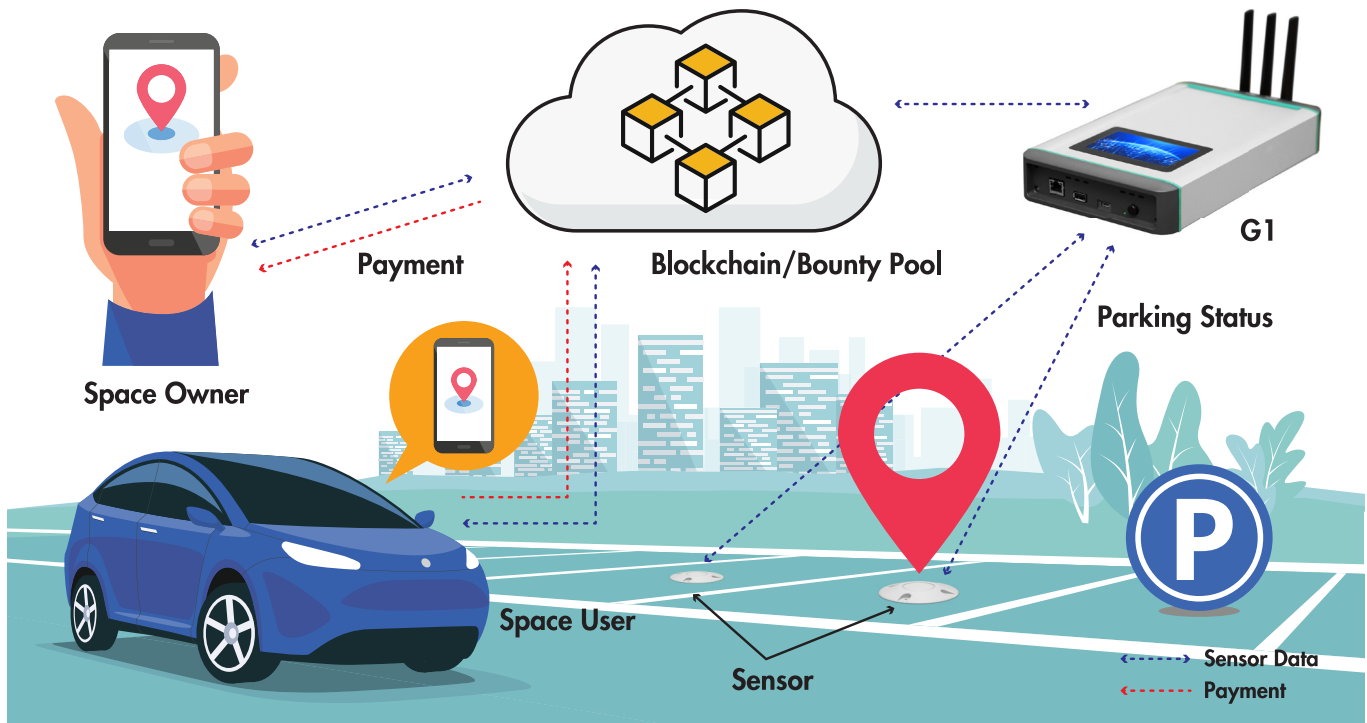
Pet Tracking

Receive alerts & notifications if your pet leaves a certain radius
Locate a missing pet

Senior Care

Continuously monitor location of at-risk patients, such as Alzheimer's or dementia patients.

Shared Parking

Space Owner

Payment

Blockchain/Bounty Pool

G1

Parking Status
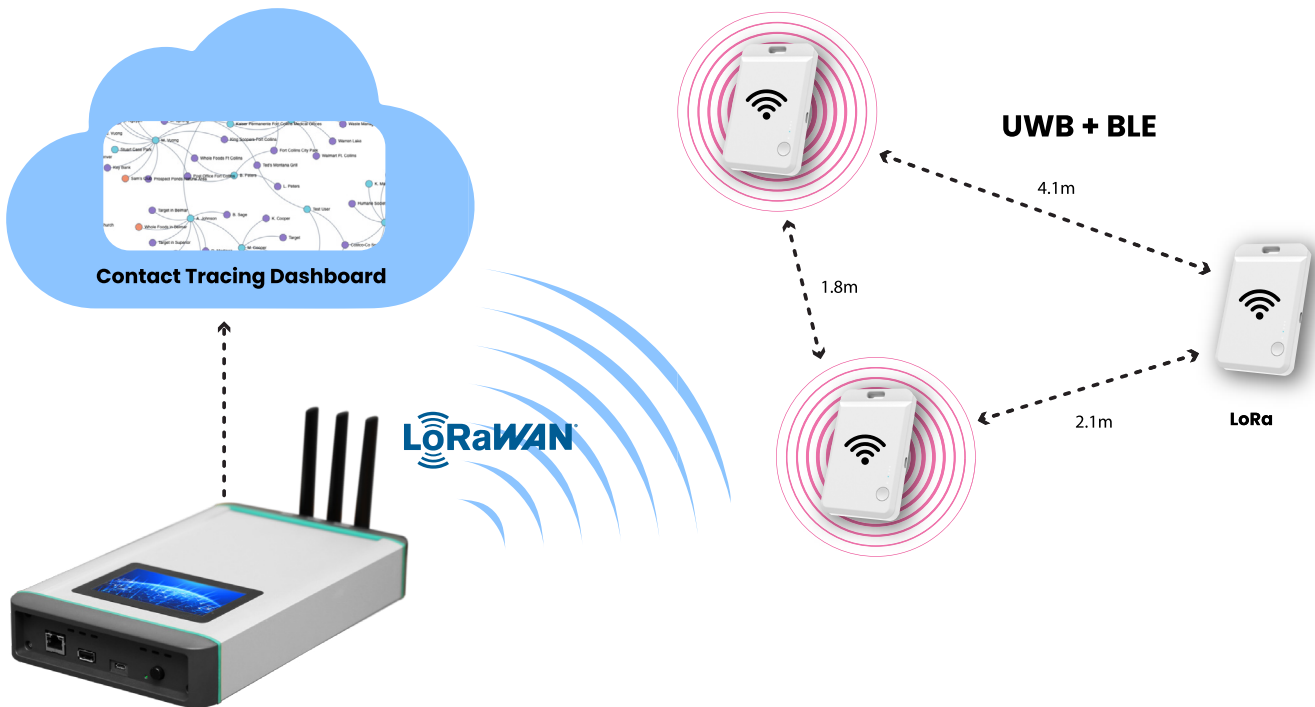
Space User

Sensor

Sensor Data

Payment

Nesten's decentralized, multi-layer blockchain network is ideal for creating new opportunities in the sharing economy that generate consumer value, optimize existing infrastructure, and maximize available profits. The Smart Parking System offers a unique turnkey approach based on peer-to-peer transactions that improves the efficiency and accessibility of your business.

Complete smart parking platform

• Parking sensors with industry-leading accuracy
• Intelligent LoRaWAN wireless station
• Fully integrated with cloud network and blockchain processing
• Customizable app software
• Real-time notification of available parking spaces

Contact Tracing & Social Distancing
(UWB+BLE+LoRA)

Contact Tracing Dashboard

LoRaWAN

UWB + BLE

4.1m

1.8m

2.1m

LoRa

Nesten provides a transparent, immutable, and secure solution for the growing and immediate need for accurate contact tracing without sacrificing personal privacy. Data is encrypted at the point of origin, retaining user anonymity even when stored in the blockchain.

- Contact Tracing capability enables you to quickly identify employees who have had contact with an infected co-worker.
- Social Distancing function—with a default proximity setting of six feet—sends alerts to employees if they are too close to each other.
- SafeTag
  - Small, rechargeable wearable device
  - Captures proximity and dwell time between employees for contact tracing purposes
  - Features built-in vibration and LED alerts for social distancing enforcement

Contact

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