

TrailGuard AI System

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TrailGuard AI System Latest News

Similipal Tiger Reserve is the first reserve where TrailGuard AI system has shown success as an 'anti-poaching tool.

About TrailGuard AI System

It is an end-to-end, **camera-based alert system** designed for enhancing wildlife conservation and promoting human-wildlife coexistence in remote areas.

Features of TrailGuard AI System

- The system combines durable outdoor hardware, **on-the-edge AI algorithms**, and real-time transmission capabilities, and can be deployed along trails or access points in areas of interest.
- Its battery **lasts for six months** to one year based on the number of photos it sends
- It **autonomously detects target objects**, and transmits real-time alerts that can trigger rapid-response to entry by poachers or illegal loggers, wildlife entering agricultural or pastoral lands, or status of endangered or exotic invasive species.

- It transmits human and wildlife activities in **remote areas in under 30 seconds**, enabling real-time interventions.

Working of TrailGuard AI System

- They operate on a **low-power mode** by default but switch to a high-power mode when they sense movement, and capture an image.
- The camera then performs **AI inference on the edge**, meaning it uses the chip inside to sort between various object classes such as 'animals', 'humans', and 'vehicles' in the image.
- If the AI deems it necessary, it autonomously transmits an image using the cellular system attached to the camera to an end-user in 30-40 seconds.

TrailGuard AI System FAQs

Q1: What is the AI camera for wildlife?

Ans: AIT uses pattern recognition to identify images that contain animals and discard those that do not.

Q2: How artificial intelligence is changing wildlife research?

Ans: It is by optimizing data collection, monitoring, and analysis efforts.

Q3: Who is the father of artificial intelligence UPSC?

Ans: John McCarthy.

Source: TH

Source: <https://vajiramandravi.com/current-affairs/trailguard-ai-camera/>

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