Swarm Doll World Platform

Patent-Pending Low-Power Collective Interactive Doll Platform (AI + IoT)

Company: xHuman Ltd (Canada) | Founder: Steven Shi (Student Founder)

One-line Value / ■■■■■

Not "a smarter toy", but a long-term, operable, and scalable interactive doll platform.

Problem / ■■

/   always-on

Most interactive toys fail due to always-on connectivity: battery drain, instability, high maintenance cost, and poor retention.

Solution / ■■■■

+   +

Event-driven low-power nodes + cloud collective character engine + event replay recovery: the character stays "alive" and recoverable.

Key Innovations / ■■■■

- •   /
- • Event-driven architecture: react only on events, no constant heartbeat required.
- •
- • Group consistency role engine: multiple dolls maintain one persistent collective character.
- •
- • Event replay & recovery: rebuild state from history for reliability and operability.

Use Cases / ■■■■

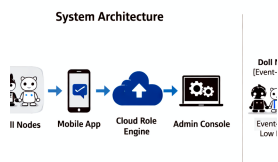/   /   /   IoT

Use cases: family companion dolls / pet-like interactive characters / collectible ecosystem / low-power interactive IoT

IP Status / ■■■■

+   Patent Pending   +   xHuman   +   /

IP: Patent filings submitted in China + Canada (Patent Pending); trademarks filed in China + Canada (xHuman word mark + logo+word mark).

System Overview A

System Architecture

System Overview B

Swarm Doll Platform Overview