FutureIoT, Asia: Cognizant's Global Chief Technology Officer Discusses the Benefits of Swarm Intelligence

"Swarm intelligence, applied to robotics, is an emerging field of AI inspired by the behavioural models of social insects (ants, bees, wasps)," Ann Chauhan writes. "A swarm combines the power of many minds into one, allowing the system to be smarter, more insightful, and more creative."

Excerpts from FutureIoT's article:

"Swarm intelligence is transforming robotics, enabling physical robots to achieve a desired collective behaviour based on inter-robot interactions as well as their interaction with the environment.

The key characteristics of the swarm include autonomy, flexibility, cooperation, scalability and decentralized control. In other words, all autonomous robots work towards a common goal; and each one of the robots is autonomous/independent, but works for all/each other. For example, a swarm of bots can be released in the bloodstream to diagnose cancer and can be reprogrammed for targeted drug delivery when anomalies are detected.

Devices that constitute a swarm are typically inexpensive and possess only some of the communication and computation capabilities needed to operate as part of a collective whole. The swarm is powered by individual bots capable of operating in a fully autonomous mode and having capabilities such as self-deployment, self-repair, and self-optimization. Operating in a swarm enables the optimal distribution of computational and storage workload, and reduces communication dependencies with base systems."

Click **here** to read more.

https://news.cognizant.com/2019-06-28-Aan-Chauhan-Discusses-the-Benefits-of-Swarm-Intelligence