



HOW IS AI TRANSFORMING SURVEILLANCE?



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Artificial Intelligence is transforming the world. The incorporation of AI is affecting many aspects of our lives. Its use also enhances surveillance abilities, allowing organizations and governments to improve their security. However, there are risks and concerns surrounding AI surveillance.

The market is increasing with technology companies heavily investing in R&D. China leads the way, notably Huawei, Hikvision, Dahua and ZTE, supplying the technology into many countries. USA companies such as IBM, Cisco, and Japan NEC are also leading companies.

AI Surveillance benefits:

- Powerful surveillance tool with advanced features, such as accuracy, eliminating human error and efficiency.
- The ability to process metadata, a system that never tires and continually improves.

Applications Examples:

- Smart City and Safe City

A technology-intensive city, with sensors everywhere and highly efficient public services, thanks to the information gathered in real-time by thousands of interconnected devices.

- Facial recognition systems

A biometric technology that uses cameras, both video or still images, matches stored or live footage of individuals with images from a database.

- Smart policing

The objective of smart policing is to process a large quantity of data distinguished by geographic location, historic arrest, types of crimes, biometric, social media, respond to criminal acts, make predictions about future illegal activity.

Risks

As with any growing technology, there are inherent associated risks. However, in AI, the case is far more complicated. Lack of regulations and often a thin line between lawful and unlawful surveillance only add to the risks associated with this fast-expanding technology.

The data are storable, accessible and searchable, and their disclosure to and use by State authorities are largely unregulated. As a result, analysis of this data can be both highly revelatory and invasive, particularly when information is combined and aggregated.

As such, states are increasingly drawing on communications data to support law enforcement or national security investigations.

States are also compelling the preservation and retention of communication data to enable them to conduct historical surveillance.

Privacy

The spread of AI surveillance continues to grow fast; AI gives rise to troublesome ethical questions. For example, many experts express concerns about facial recognition error rates and heightened false positives for minority populations. The public is increasingly aware of algorithmic bias in AI training datasets and their prejudicial impact on law enforcement's predictive policing algorithms and other analytic tools.

The good news is that we have time to initiate debate and build a balance of AI surveillance. The 2020 pandemic only accelerated the growth of these technologies, embedded in governance and politics. Now, the time is to create a balanced AI and debate policies and regulations.

At Jansta Associates Limited, we serve our clients with a vast array of engineering consulting services. So, if you are thinking of deploying new technology, design or updating the system, we can help you navigate this complex subject.

