Innovative AI technologies for sophisticated integration of cyber and physical world

Privacy preserved AI framework based on distributed anonymization

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Summary: For the advancement of AI technologies, it is important to train engines from a large amount of real data. Though the rapid increase of photos taken by mobile devices helps such advancement, the difficulty to share data including personal features on a cloud given the privacy concerns inhibits broader applicability.

In this study, we will investigate a media processing techniques to automatically judge level of privacy and generate images without the privacy for the use of training data for AI. Then, we will implement collective network model composed of private AI group capable of the privacy preservation the edge devices with cameras, which are connected to cloud AI sharing large scale learning data without containing privacy information.

Also, we will demonstrate the power of AI with privacy protection by assisting missing visual cognition of the blind and declining memory of the elderly people.

