Towards Industrial Metaverse and Its Key Technologies(Code: 2j94k)

Goal

Recent years, the emerging of metaverse makes a big splash to the world, which could be the ultimate application of the latest information and communication technologies and brings on brand new digital word for our society. The corresponding key technologies, typical application, etc. for metaverse are investigated by many companies, universities, institutions and so on. However, it is too complicated and difficult to construct, operate, and optimize an efficient and effective metaverse based on current technologies. As the core engine of our society, industry domain could be the key to make breakthrough of metaverse, that is, industrial metaverse. Industrial metaverse is the application exploration of metaverse in manufacturing domain, which is the developing trend of smart manufacturing. The success of industrial metaverse will great promote the development of metaverse. Therefore, the studies of industrial metaverse and its key technologies should be concerned for now.

Topics:

- Industrial metaverse concept and definition
- Modeling, operating, and optimizing of industrial metaverse
- Typical scenarios of industrial metaverse
- AR/VR/MR-driven industrial metaverse
- Digital twin-driven industrial metaverse
- Human-centric industrial metaverse
- Blockchain technology for industrial metaverse
- Human-computer/machine interface for industrial metaverse
- Decision-making technology for industrial metaverse
- Machine learning-driven industrial metaverse
- Knowledge-based industrial metaverse
- Reconfigurable, flexible, and changeable industrial metaverse
- Human-robot collaboration for metamanufacturing

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