

## 6G: Emerging Architectures, Technologies and Challenges

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**Abstract :** The advancement of technology never stops because the demands for improved internet and communication connectivity are increasing. Just as 5G networks are rolling out, the world has begun to talk about the sixth-generation networks (6G). The semantics of 6G are more or less the same as 5G networks because they strive to boost speeds, machine-to-machine (M2M) communication, and latency reduction. However, some of the distinctive focuses of 6G include the optimization of networks of machines through super speeds and innovative features. This paper discusses many aspects of the technologies, architectures, challenges, and opportunities of 6G wireless communication systems.

**Keywords :** 6G, characteristics, infrastructures, technologies, AI, ML, IoT, applications

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