Mobile Edge Computing

- Concept in 5G
- Brings cloud closer to network edge
- Traffic redirecting and low latency.
- Provides services to enhance apps with context information.
- Facilitates running apps at the right location and time.

→ Edge and Cloud

- Edge computing devices depend on network access to the cloud to receive machine learning stuff.
- They need to send sensor and data to cloud.
- Strong bandwidth requirements → 5G to 6G
- Low latency
- Massive ammount of nodes.

→ MEC: Mobile Edge Apps

. Run as VMs
. consume and provide edge services
. have rules about DNS and resources
. assisted by mobility info
. may be relocated to other mobile edge host.

→ MEC: Mobile Edge Platform

. environment for apps discover, consume and offer edge services
. configures DNS
. provides mobile edge services
. provides access to persistant storage
. controls data-plane in SDN.

→ MEC: Mobile Edge Orchestrator

. maintains overall view of system and mobile edge hosts (resources, services, topology)
. on-boards app packages
. triggers app start and termination
. triggers app relocation

Note: MEC is envisioned as promising tools to deliver better Quality of Experience for immersive AR apps.

Key enabler for IoT and mission critical vertical solutions.

Enables apps to be deployed and run in virtualized env.

Enables autonomous networks and systems.

6G

Self-organization

P2P relationships

Ubiquous 3D coverage (space, terrestrial, undersea)

Thing-to-thing communication (Intelligent IoT).