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Mobile Edge Computing: A Survey

1.1 With respect to the problems (high latency, coverage issues etc.) of **MCC**, **MEC** is seemed to have a better performance.

1.2 **Cloudlet** focuses on locations near to end users to better manage resources and reduce costs such as communications and power regardless its wireless connection issues

1.3 **MEC** shows several **advantages** to solve problems such as high latency, high power usage and improved scalability and reliability.

1.4 **MEC** can be applied to **different areas** including healthcare, transportations and video/audio analysis, etc.

2.1 **RAN** connect end user devices with mobile core network and are divided into different parts communicated via **RNC (or BSC)**.

2.2 End-user applications talk to core network through **edge network** according to the three-layer architecture.

2.3 **Web services** handle tasks (video streaming and content caching etc.) fast by using MEC.

2.4 In 2016, **Nash equilibrium** in the scenario of multi-users were achieved by one offloading model based on the game theory.

3.1 In **C-RAN,** signal data collected from cells are sent to the cloud to minimize the processing costs.

3.2 **MEC** provides good user experience because its fast resources retrieve and computing.

3.3 **Computation-oriented and live** tasks could be faster processed with the help of the cloud and MEC.

3.4 Computing and storing resources at the edge solve the memory allocation problem caused by **LTE**.

Survey of Fog Computing: Fundamental, Network Applications, and Research Challenges

1.1 **Cloud computing** is now suffering issues including high latency, traffic congestion, data processing, communication and energy cost.

1.2 **Fog computing** allocate resources and services to geographically different parts and provide computing, storage, and networking services between EU and DCs.

1.3 **SDN** parts the control section and data section to rearrange the network.

1.4 **H-CRAN** combines ERRH and HPNs, along with BBU/RRH to optimize the resources.

2.1 **VDCs** which are separated from each other with separated performs can be used to visual data center.

2.2 **F-RANs** can both allocate resources well and computing data at the edge of the network.

2.3 **SDN-based fog computing** improved controller-switch delay performance and solved **fog-related traffic** with the reduce of latency and energy costs**.**

2.4 **ERRH** is introduced to handle the trade-off between the number of RU involved and the energy consumption.

3.1 Edge computing allows **extra VDC** to minimize the data transmission delay and costs.

3.2 To solve the delay in **SDN**, fog computing offloads data from control plane.

3.3 **D2D Communication** shares services and contents to reduce the burden of fronthaul between ERRH and BBU pools in a Cloud.

3.4 **Fog-based architecture** is important in **smart cities** providing live response and real-time location information.