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How to wisely use the resource at the edge of network?

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How to wisely use the resource at the edge of network?

I am working with Prof. Hanan Lutfiyya on fog computing as an extension of cloud computing. We believe in the future network architectures, all the devices around us can be a part of the computing system such as routers, switches, and unused personal computing devices. Users can easily borrow computing power from the nearby devices instead of executing all tasks on their own devices or far away cloud center. The setup of fog computing requires us to take computing limitation, power usage and geographical awareness into the considerations. We are exploring the possible challenges and the capabilities of the current resource management solutions of cloud computing into the fog computing environment. We are currently focusing on task offloading algorithms in semi-centralized fog computing environment.