

Cloud-Based Mobile-to-Mobile Computation Offloading

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Abstract : Mobile devices have drastically changed the way we do things on the move. They are being extremely relied on to perform tasks that are analogous to desktop computer capability. There has been a rapid increase of computational power on these devices; however, battery technology is still the bottleneck of evolution. The primary modern approach day approach to tackle this issue is offloading computation to the cloud, proving to be latency expensive and requiring high network bandwidth. In this paper, we explore efforts to perform barter-based mobile-to-mobile offloading. We present define a protocol and present an architecture to facilitate the development of such a system. We further highlight the deployment and security challenges.

Keywords : computational offloading, power conservation, cloud, sandboxing

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