Selfish Decentralized Computation Offloading for Mobile Cloud Computing in Dense Wireless Networks
ABSTRACT

• In this paper we consider selfish mobile devices in a dense wireless network, in which individual mobile devices can offload computations through multiple access points or through the base station to a mobile cloud so as to minimize their computation costs.

• We provide a game theoretical analysis of the problem, prove the existence of pure strategy Nash equilibria, and provide an efficient decentralized algorithm for computing an equilibrium.

• For the case when the cloud computing resources scale with the number of mobile devices we show that all improvement paths are finite.
EXISTING SYSTEM

• Offloading computation to a mobile cloud is a promising solution to augment the computation capabilities of mobile devices.
• Mobile cloud computing has emerged as a promising solution to serve the computational needs of these computationally intensive applications.
PROPOSED SYSTEM

• Furthermore, we provide an upper bound on the price of anarchy of the game, which serves as an upper bound on the approximation ratio of the proposed decentralized algorithms.

• We use simulations to evaluate the time complexity of computing Nash equilibria and to provide insights into the price of anarchy of the game under realistic scenarios.
HARDWARE REQUIREMENTS

• Processor               -              Intel core i3
• RAM       -  2B
• Hard Disk       -  20 GB
SOFTWARE REQUIREMENTS

• Operating System : LINUX
• Tool : Network Simulator-2
• Front End : OTCL (Object Oriented Tool Command Language)
REFERENCE


