We seek to design a mobile application offloading framework for enterprise settings that maintains security, supports multiple objectives, performs completely automated application partitioning, and opportunistically leverages any available computing resources.

Focus on enterprise networks containing:
1) Mobile devices running one or more resource-demanding applications
2) Desktops which are occasionally idle
3) Access to a remote cloud
4) Central controller for programmable network fabric and offloading system

Remote Cloud Offloading
Similar to local offloading, except execution state and application code are transferred across the Internet to a “cloud” server on the UW-Madison OpenFlow network.

Offloading Decision Process
1) Monitor resource usage for each application at a fine granularity
2) Construct a list of candidate computing resources where the trust level exceeds the required security of an application and device
3) Select an application to offload and a destination to optimize administrator-specified objectives across all mobile devices
4) Move applications between offloading destinations as conditions change — applications are launched, devices join the network, etc.