

Technical Club: Mobile Computing

Technical back ground and utility of the club

"Mobile computing is "taking a computer and all necessary files and software out into the field." Mobile computing is the ability to use computing capability without a pre-defined location and/or connection to a network to publish and/or subscribe to information." A portable computer is a general-purpose computer that can be easily moved from place to place, but cannot be used while in transit, usually because it requires some "setting-up" and an AC power source. The mobile computing uses the computing devices like Laptop, Tablet computer, calculators, wearable computers.

Mobile Computing, focuses on the key technical issues related to :

- a) Architectures - Mobile networks and hosts, Agents and proxies, Mobility management, mobile agent and proxy architectures Integrated wire-line and wireless systems, Planning and standardization.
- b) Support Services - Mobility and roaming, Nomadic computing, Multimedia Operating system support, Power management.
- c) Algorithm/Protocol Design and Analysis - Online and mobile environments, Limited bandwidth, Intermittent connectivity.
- d) Mobile Environments - Data and knowledge management, Performance modeling and characterization, Security, scalability and reliability, Design, management and operation, Systems and technologies.
- e) Mobile Communication Systems - Wireless, cellular and spread-spectrum systems, Multi-user and multi-access techniques and algorithms, Multi-channel processing, Channel coding, Data coding and compression.
- f) Applications - Location-dependent and sensitive, Nomadic computing, Wearable computers and body area networks, Multimedia applications and multimedia signal processing, Pervasive computing, Wireless sensor networks.

The association with this club will create interest of students in this technological domain and inspire their creativity to innovate through practical learning and application oriented mindset. Undoubtedly , this is the aspect mainly seen in the engineering profession and thus definitely boost the career prospects and employability.

Activities to be considered under the club :

The activities of the club have been well formulated to develop interest and competence of the students in the related technologies with emphasis on application aspects of the concepts. Following activities have been considered ;

- Learning through technical magazines and journals
- development of algorithms and applications in emerging mobile computing trends
- Paper writing & presentation
- Quiz and group discussions on the club theme related topics
- Conduction of Workshops and practical training sessions
- Interaction with eminent industrial and academic experts in the domain of club theme
- Industrial and institutional tours
- Considering industrial R&D projects in the domain of club theme