

Welcome

Seminar Series of the Department of Computer Science Electrical Engineering Presents

Power saving algorithms in Wireless networks

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Abstract

As the demand for high speed bandwidth grows, requirements for wireless networking are becoming tough. An important issue is regarding the life time of mobile terminal that can be extended by controlling the doze time of node. This talk will briefly review the reality of power saving in wireless cellular networks and will also present the power saving standard of the mobile WiMAX network that has been deployed recently as an interim solution towards 4G networks. Lastly, it will introduce a scheduling algorithm for Adhoc networks that uses the novel concept of "Affinity", which is defined as a means to indicate the level of task linking. Through analysis, I confirm that our proposed affinity-based algorithm is far superior to the shortest job first algorithm and comparable to the optimal scheduling algorithm which is not executable in real size of linking topology.

Bio: Prof. Saewoong Bahk Received the B.S. and M.S. degrees in electrical engineering from Seoul National University in 1984 and 1986 respectively, and the Ph.D. Degree from the University of Pennsylvania in 1991. From 1991 through 1994 he was with AT&T Bell Laboratories as a technical staff where he worked for AT&T network management. In 1994, he joined the school of electrical engineering at Seoul National University. He has been serving as TPC members for IEEE Globecom, ICC, INFOCOM, PIMRC, HPSR, WCNC, etc. He is an Editor of Journal of Communications and Networks, a board member of KICS, editor-in-chief of KICS Journal, IEEE senior member, and a member of Who's who professional. He authored/coauthored over 100 international technical papers in the areas of wired/wireless networking.