

Wireless Mobile Networks



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Registration #: 453

Enrollment # : 144001-020

Dissertation for partial fulfillment of the requirements of MCS for the award of the MCS degree in Networks Telecommunication

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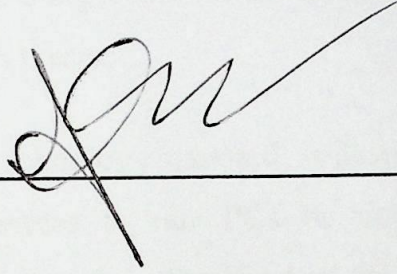
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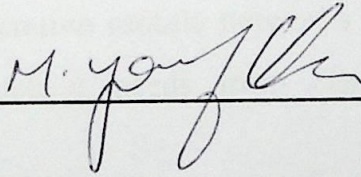
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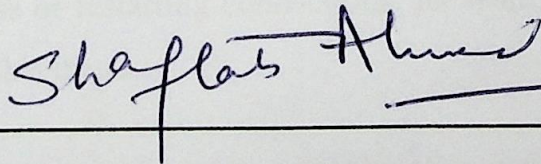
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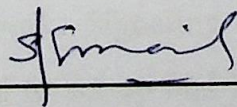
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Abstract

Wireless networks have been an essential part of communication in the last century. Over recent years, telecommunications has been a fast-growing industry. Traditionally, first-generation wireless networks were targeted primarily at voice and data communications occurring at low data rates. Then evolution of second- and third-generation wireless systems that incorporate the features provided by broadband. Like most technologies, advances in wireless communications occur mainly through a process of steady evolution for example a big evolution in GSM like GPRS, IS 136 and IS 95 and CDMA is discussed in this thesis.

Bluetooth, a new wireless interconnect technology standard, is designed to replace the many cables we need to connect devices to our PCs or networks. Its usage, specification and what is the future of Bluetooth is discussed.

A new technology in third generation mobile networks UMTS is also discussed. Its history and improvement which it needs from other networks are discussed.

The IETF has developed a protocol called Mobile IP that allows IP nodes to move without changing their IP address or restarting connections. Its working, its network and its evolution is discussed in this thesis.

Wireless LANs are becoming increasingly more common after standardization has been reached. Its architecture, standards and configuration are discussed in this thesis. In VOIP the voice signal is digitized, compressed and converted to IP packets and then transmitted over the IP network. Signaling protocols like H.323, SIP, RTP, MGCP, RTSP, RSVP etc, are used to set up and tear down calls, carry information required to locate users and negotiate capabilities are discussed. IPv6 is also discussed.

Liberalization has resulted in the rapid growth, modernization and development of the telecom sector in Pakistan. What is the present condition of telecom sector in Pakistan and what is future are discussed in this thesis.

Acknowledgements

All praise to Almighty Allah, the most merciful and compassionate, who enabled me to complete this project.

I express my gratitude to my kind supervisor Dr.M.Yousaf.Khan who kept my morale high through his suggestions and appreciation. Without his precious guidance and help I could never have been able to develop this thesis. I would like to express my gratitude to all my teachers in the department for their moral support.

I would like to pay special thanks to my colleagues who motivated me to work hard and provided moral and technical support that enabled me to complete my work. I am also thankful to my seniors who provided me guidance and support in this project. They made their all possible efforts to keep me motivated and to complete the project in time.

And last but not the least; I would like to acknowledge the support of my family members. I would like to admit that I owe all my achievements to my truly, sincere and most loving parents, brother and sister, who mean the most to me, and whose prayers are a source of determination for me.

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