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""3.3.4 Packet data convergence control (PDCP)""; ""3.3.5 Radio resource control (RRC)""; ""3.3.6 Non-access stratum protocols""; ""4 LTE-advanced""; ""4.1 LTE-A key technologies""; ""4.1.1 Carrier aggregation""; ""4.1.2 Enhanced MIMO""; ""4.1.3 Relays""; ""4.1.4 Coordinated multiple point transmission and reception""; ""4.2 LTE-A radio protocol architecture""; ""4.3 Comparison of LTE and LTE-A""; ""5 Wireless local area network""; ""6 Simulation of wireless networks""; ""6.1 Wireless network simulation tools""  
""6.1.1 Network simulator 2""""6.1.2 Optimized network engineering tool""; ""6.1.3 OMNeT++""; ""6.1.4 GloMoSim""; ""6.1.5 LTE-Sim""; ""6.2 Mobility models""; ""6.2.1 Random walk mobility model""; ""6.2.2 Random waypoint mobility model""; ""6.2.3 Other mobility models""; ""6.3 Metrics of mobility models""; ""6.4 Case studies and simulation results""; ""7 Conclusion""; ""References""; ""2 Network planning and designing""; ""1 Introduction""; ""2 TCP in MANET""; ""2.1 Problems of TCP in MANET""; ""3 MANET Routing Protocols""; ""4 Related work""; ""5 Presentation of CL-TCP-OLSR""  
""6 Evaluation of CL-TCP-OLSR""""6.1 Evaluation environment""; ""6.2 Evaluation parameters""; ""6.2.1 Effect of mobility""; ""6.2.1.1 Effect of network density (number of nodes)""; ""6.2.1.2 Energy consumption""; ""7 Conclusion and future work""; ""Acknowledgements""; ""References""; ""3 Rate adaptation algorithms for reliable multicast transmissions in wireless LANs""; ""1 Introduction""; ""1.1 Modulation schemes and theoretical throughput""; ""2 Related work""; ""3 The 802.11aa group address transmission service""; ""3.1 The 802.11aa group addressed transmission service""  
""3.1.1 Directed multicast service""

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## Sommario/riassunto

Modeling and Simulation of Computer Networks and Systems: Methodologies and Applications introduces you to a broad array of modeling and simulation issues related to computer networks and systems. It focuses on the theories, tools, applications and uses of modeling and simulation in order to effectively optimize networks. It describes methodologies for modeling and simulation of new generations of wireless and mobiles networks and cloud and grid computing systems. Drawing upon years of practical experience and using numerous examples and illustrative applications recognized experts in both

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