



Naoyuki KARASAWA

Assistant Professor

Program: Electrical and Information Engineering

Area: Information Engineering

Undergraduate: Dept. of Engineering

Professional Expertise

His professional expertise encompasses network engineering for wireless networks and its applications.

Research Fields of Interest

Development of access control method for wireless multi-hop networks (ad hoc networks).

Network design for wireless multi-hop networks (ad hoc networks).

Analysis and performance evaluation in mobile communication networks, TCP/IP networks and wireless multi-hop networks (ad hoc networks).

Education

1998: Master of Engineering, Niigata University, Japan

1996: Engineering, Niigata University, Japan

Professional Societies and Activities

1. IEICE Member
2. IEEE Member

Awards

The Best Paper Award of IEICE, 1997

Major Publications

Papers

- [1] "Analysis and Modelling of Willingness to Receive Reward for Relay in Ad Hoc Networks," IFIP International Federation for Information Processing, Volume 252, Integration and Innovation Orient to E-Society, Volume 2, pp. 160-167, 2007.
- [2] "A Novel Configuration of Large-Scale Bluetooth Networks: MBNET," IEICE Transactions on Communications B, vol. J89-B, no. 8, pp. 1441-1452, 2006.
- [3] "An Architecture, Topology and Performance of the Multihop Bluetooth Network (MBNET)," Proceedings of IEEE 59th Vehicular Technology Conference (VTC 2004-Spring), Vol. 5 of 5, pp. 2600-2604, 2004.
- [4] "Connectivity Experiments in a Bluetooth-Based Multi-Hop Networks," The 6th International Symposium on Wireless Personal Multimedia Communications (WPMC'03), MA7-4, 2003.
- [5] "Wireless LAN with wireless multihop backbone network (WMLAN)," Proceedings of the 2001 IEEE International Conference on Wireless LANs and Home Networks (ICWLHN'01), pp. 349-358, 2001.
- [6] "Cliques Packing Approximation for Analysis of Teletraffic Characteristics of Dynamic Channel Assignment Considering Mobility," IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, vol. E84-A, no. 7, pp. 1651-1659, 2001.
- [7] "A Scheduling Algorithm for Packet Delay Differentiation," Transactions on Communications B, vol. J84-B, no. 7, pp. 1311-1320, 2001.
- [8] "A Web Server Selection Algorithm Using QoS Measurement," 2001 IEEE International Conference on Communications (ICC2001) Record, vol. 8 of 10, pp. 2332-2336, 2001.
- [9] "A Circuit -connection -based Multihop Wireless Infrastructure for Local Communities," Proceedings of 2001 IEEE International Symposium on Circuits and Systems

(ISCAS 2001), vol. 4 of 5, pp. 898-901, 2001.

[10] "A PHS-based Multihop Wireless Infrastructure for Local Communities," Proceedings of The 3rd International Symposium on Wireless Personal Multimedia Communications (WPMC'00), pp.437-442, 2000.

[11] "PHS Based Ad Hoc Networks," Proceedings of 2000 IEEE International Conference on Industrial Electronics, Control and Instrumentation (IECON-2000), vol. 2, pp. 1141-1146, 2000.

[12] "Teletraffic Characteristics in Cellular Systems and Traffic Flow in Road Systems," IEEE 49th Vehicular Technology Conference (VTC'99) Record, vol. 2, pp.1193-1197, 1999.

[13] "Traffic Characteristics of Dynamic Channel Assignment under Non Uniform Traffic Distribution," IEEE 47th Vehicular Technology Conference (VTC'97) Proceedings, vol. 3, pp. 1465-1469, 1997.

[14] "Characteristics of Dynamic Channel Assignment in Cellular Systems with Reuse Partitioning," IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, vol. E79-A, no. 7, pp. 983-989, 1996.