

Jong-Hoon Youn

Assistant Professor
Computer Science Department
University of Nebraska at Omaha
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EDUCATION

Nov. 1999 – Ph. D. Dept. of Computer Science
Jun. 2002 Oregon State University
Sep. 1997 – M. S. Dept. of Computer Science
Nov. 1999 Oregon State University
Mar. 1990 – B. S. Dept. of Computer Science
Feb. 1997 Kyonggi University, Republic of Korea

RESEARCH INSTRESTS

- Energy Efficient Communication Protocols for Wireless Sensor Networks
- Topology-Independent Transmission scheduling algorithms in Multihop Packet Radio Networks
- Scalable Routing Protocols for Mobile Ad Hoc Network
- Fault-Tolerant Wormhole Routing Algorithms
- Efficient Encoding/Decoding Schemes for Balanced Codes

RESEARCH EXPERIENCE

Aug. 2002 **Assistant professor at Dept of Computer Science**
– Present **University of Nebraska, Omaha**
Mar. 1998 – **Research Assistant at Oregon State University**
Aug. 2002 - Efficient Encoding/Decoding methods for Balanced Codes
- Fault-Tolerant Routing Algorithms for Mesh Networks
- Security Issues for Wireless Communications
- Transmission Scheduling Algorithms for Mobile Ad Hoc Networks (Ph. D. Thesis)

PUBLICATIONS

Journal Papers

1. Jong-Hoon Youn and Bella Bose , *Some improved encoding and decoding schemes for balanced codes*, IEEE Transactions on Computers, pp 1229 – 1231, sep. 2003.

Conference Papers

1. Parvathi Chundi , Jong-Hoon Youn, Anand Visvanathan and Jitender Deogun, *A Scalable Hierarchical Data Dissemination Protocol for Wireless Sensor Networks*, International Conference on Computer Science, Software Engineering, Information Technology, e-Business, and Applications (CSITeA), Dec. 2004.
2. Jong-Hoon Youn, Ramdharma Kalva, and Seungjin Park, *Efficient Data Dissemination and Aggregation in Large Wireless Sensor Networks*, 60th IEEE Semiannual Vehicular Technology Conference (VTC 2004 fall), Sep. 2004.
3. Jong-Hoon Youn, Cheolsoo Kang, and Seungjin Park, *Asynchronous Power Saving Schemes for IEEE 802.11 Ad Hoc Networks*, International Conference on Wireless Networks (ICWN 2004), June 2004.
4. Jong-Hoon Youn, Bella Bose, and Seungjin Park, *Position-Based Topology-Independent Scheduling Algorithms for Mobile Ad Hoc Networks*, International Conference on Wireless Networks (ICWN 2004), June 2004.
5. Jong-Hoon Youn and Seungjin Park, *Improving the Efficiency and Fairness of Time-Spread Multiple-Access (TSMA) using Adaptive p-persistence*, IEEE Semiannual Vehicular Technology Conference (VTC) 2003-Spring, Apr. 2003.
6. Seungjin Park, Steven Seidel and Jong-Hoon Youn, *Fault-Tolerant Broadcasting in Wormhole-Routed Torus Networks*, Proc., IEEE International Parallel and Distributed Processing Symposium, April 2002.
7. Jong-Hoon Youn, Bella Bose and Seungjin Park, *A Scalable Transmission Scheduling Algorithm for Mobile Ad Hoc Network*, IEEE Pacific Rim International Symposium on Dependable Computing 2001 (on WARCC2001), pp. 5 - 9, Dec. 2001.
8. Jong-Hoon Youn and Bella Bose, *A Topology-Independent Transmission scheduling in Multihop Packet Radio Networks*, IEEE GlobeCom 2001, pp. 1918 - 1922, Nov. 2001.
9. Jong-Hoon Youn and Bella Bose, *An Energy Conserving Medium Access Control Protocol for Multihop Packet Radio Networks*, IEEE International Conference on Computer Communications and Networks 2001, pp. 470 - 475, Oct. 2001.
10. Jong-Hoon Youn and Bella Bose, *Some improved encoding and decoding schemes for balanced codes*, IEEE Pacific Rim International Symposium on Dependable Computing, pp. 103 - 109, Dec. 2000.
11. Jong-Hoon Youn, Bella Bose and Seungjin Park, *Fault-Tolerant Communication in Meshes with Some Nonconvex Faults*, International Conference on Communications in Computing, pp. 233 - 239, June 2000.
12. Seungjin Park, Jong-Hoon Youn and Bella Bose, *Wormhole Routing in Faulty Mesh Networks*, International Conference on Parallel and Distributed Processing Techniques and Applications, pp. 633 - 638, June 2000.
13. Seungjin Park, Jong-Hoon Youn and Bella Bose, *Fault-Tolerant Wormhole Routing Algorithms in Meshes in the Presence of Concave Faults*, Proc., IEEE International Parallel and Distributed Processing Symposium, pp. 633 - 638, May 2000.

COURSES TAUGHT

- CSCI 3550 Communication Networks
- CSCI 4350 Computer Architecture
- CSCI 8620 Mobile Computing and Wireless Networks: Spring, 2003

RESEARCH GRANTS AWARDED

1. *Center for Mobile Computing Research*, Co-PI, NSF-EPSCoR RII, \$500,000, Feb. 2004 – Jan. 2007.
2. *Nebraska High Performance Wireless Research and Education Networks*, Co-PI, Nebraska Research Initiative (NRI), \$681,332, Aug. 2004 – July 2006