

Resume for Prof. Ruay-Shiung Chang (張瑞雄)
Department of Computer Science and Information Engineering
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Name: Ruay-Shiung Chang

Sex: Male

Birth Date: 1958, 6, 6

Marital Status: Married with two children

Education:

Ph.D. 1988, Department of Computer Science, National Tsing Hua University,
Hsinchu, Taiwan

B.S. 1980, Department of Electrical Engineering, National Taiwan University,
Taipei, Taiwan

Professional Expertise:

Grid Computing, Wireless Networks, Internet Technology

Experience:

Engineer, China Still Corporation, July 1982 to July 1983

Pursuing Ph.D. degree in NTHU, August 1983 to March 1988

Senior Researcher, Chung Shan Institute of Science and Technology, April 1988 to
March 1992

Associate Professor, Department of Information Engineering, National Taiwan
University of Science and Technology, April 1992 to January
1998

Professor, Department of Information Engineering, National Taiwan University of
Science and Technology, February 1998 to July 1998

Professor and Chair, Department of Computer Science and Information
Engineering, National Dong Hwa University, August 1998 to
July 2001

Professor and Dean of Student Affairs, National Dong Hwa University, August

1999 to January 2002

Professor and Dean of Academic Affairs, National Dong Hwa University, February
2002 to January 2006

Current Position:

Vice President, National Dong Hwa University, from February 2006

Professional Activities:

1. Member of Internet Society, Member of ACM, Senior Member of IEEE, Member of Japan IEICE, Permanent Member of Taiwan IICM (Institute of Information and Computing Machinery)
2. Public Interest Registry (www.pir.org) .org advisory council member
3. Regular Reviewer of *ACM Computing Reviews*, published more than 40 reviews
4. Serving on the Editorial Board, *Journal of Internet Technology*
5. Guest Editor, *Wireless Communications and Mobile Computing*
6. Guest Editor, *Journal of Information Science and Engineering*
7. Associate Editor, *International Journal of Internet Protocol Technology*
8. Editor-in-Chief of Taiwan *Communications of Institute of Information & Computing Machinery*, 1996-1997
9. General Chair, 2003 Workshop on Computer and Communication Networks, Taiwan
10. Program co-chair for ICPADS2002
11. Program Chair for ICS2002
12. Panelist, Tanet98
13. Taiwan NICI IPv6 Technical Division, Mobile IPv6 Group Leader, 2001/8~2003/7
14. Panelist, 2002 Discrete math and combinatorial algorithm workshop
15. Program committee member for many national and international conferences
16. Reviewer for many international journals

Selected Recent Journal Publications:

- (1) R.S. Chang and C.T. Hsieh, "Uplink Channel Assignment with Balanced Load for Code Division Multiple Access Cellular Systems," *Wireless Communications and Mobile Computing*, Vol. 3, Issue 1, 2003, pp. 63-72.
- (2) R.S. Chang, W.Y. Chen and Y.F. Wen, "Hybrid Wireless Network Protocols," *IEEE Trans. Vehicular Technology*, Vol. 52, No. 4, July 2003, pp. 1099-1109.
- (3) S.J. Leu and R.S. Chang, "Integrated Service Mobile Internet: RSVP over Mobile IPv4&6," *Mobile Networks and Applications*, Vol. 8, No. 6, December 2003, pp. 635-642.

- (4) H.S. Ting and R.S. Chang, "Improving the performance of broadcasting in ad hoc wireless networks," *Journal of Internet Technology*, Vol. 4, No. 4, Oct. 2003, pp. 209-216.
- (5) R.S. Chang and W.W. Chen, "Mobility assessment on-demand routing protocol for mobile ad-hoc networks," *Wireless Communications and Mobile Computing*, Vol. 4, Issue 4, June 2004, pp. 369-381.
- (6) R.S. Chang and H.Y. Lu, "Predictive Resource Reservation in Wireless Cellular Networks," *IEICE Trans. Communications*, Vol. E86-B, No. 12, December 2003, pp. 3538-3543.
- (7) S.J. Leu and R.S. Chang, "Handoff ordering using signal strength for wireless multimedia communications," *IEEE Trans. Wireless Communications*, vol. 3, no. 5, Sept. 2004, pp. 1526-1532.
- (8) R.S. Chang and Y.S. Yen, "A multicast routing protocol with dynamic tree adjustment for mobile IPv6," *Journal of Information Science and Engineering*, vol. 20, no. 6, Nov. 2004, pp. 1109-1124.
- (9) R.S. Chang and M.T. Chou, "Blueline: a distributed Bluetooth scatternet formation and routing algorithm," *Journal of Information Science and Engineering*, 21 (3), 479-494, May 2005.
- (10) R.S. Chang, C.H. Lin, and C.M. Wang, "A Bluetooth home network architecture and its scatternet routing," *Journal of Internet Technology*, Vol. 6, No. 3, 2005.
- (11) Chun-Chieh Huang, Ming-Huang Guo, and Ruay-Shiung Chang, "A Weight-Based Clustering Multicast Routing Protocol for Mobile Ad Hoc Networks," *International Journal of Internet Protocol Technology*, Vol. 1, No. 1, 2005, pp. 10-18.
- (12) S.Y. Wu, S.J. Leu and R.S. Chang, "An agent-based architecture for resource reservation in mobile IP networks," *International Journal of Computers and Applications*, Vol. 27, Issue 4, 2005, pp. 266-273.
- (13) Tsung-Wen Hsieh and Ruay-Shiung Chang, "Bluegon: A Polygon-Shaped Scatternet Formation Algorithm for Bluetooth," *Wireless Communications and Mobile Computing*, 6 (4), 439-451, June 2006.
- (14) Ruay-Shiung Chang and Chang-Zhou Tsai, "Adding Sense of Spatial Locality to Routing Protocols for Mobile Ad Hoc Networks," to appear in *Wireless Communications and Mobile Computing*.
- (15) Seiven Leu Ruay-Shiung Chang, "A fast and scalable IPv4&v6 address lookup algorithm," *Computer Communications*, Volume 29, Issue 16, 12 October 2006, Pages 3020-3036.
- (16) Chia-Shien Lu and Ruay-Shiung Chang, "A fast handoff method in mobile IPv6 using prerouting," *Wireless Communications and Mobile Computing*, Vol. 6

Issue 5, 673-690, August, 2006.

- (17) Ruay-Shiung Chang and An-Chin Lee, "An energy efficient data query architecture for large scale sensor networks," to appear in *IEICE Trans. Communications*.
- (18) Ruay-Shiung Chang and Po-Hung Chen, "Complete and fragmented replica selection and retrieval in data grids," to appear in *Future Generation Computer Systems*.