

Yong Pei

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Education:

B.S. (Electrical Power Engineering), Tsinghua University, 1996

M.S. (Electrical Engineering), Rensselaer Polytechnic Institute, 1999

Ph.D. (Electrical Engineering), Rensselaer Polytechnic Institute, 2002

Professional Career:

08/2003 – Date: Assistant Professor, Computer Science and Engineering Department,
Wright State University

10/2003 – Date: Director, Mobile Information and Communication Systems Lab,
Wright State University

08/2002 – 06/2003: Visiting Assistant Professor, Electrical and Computer Engineering Department,
University of Miami

04/2002 – 08/2002: Post-Doctoral Research Associate, Electrical, Computer and System Engineering
Department, Rensselaer Polytechnic Institute

Society Member:

Member, IEEE, ACM and ASEE; Member, IEEE Communications Society; Member, IEEE Computer Society; Member, IEEE Signal Processing Society; Member, IEEE Information Theory Society; Member, IEEE Circuits and Systems Society.

Selected Relevant Publications:

1. Y. Pei and J.W. Modestino, "Interactive Video Coding and Transmission Over Heterogeneous Wired-to-Wireless IP Networks Using An Edge Proxy", *EURASIP Journal on Applied Signal Processing, Special Issue on Multimedia over IP and Wireless Networks*, pp.253-264, vol.2, 2004.
2. Qi Qu, Yong Pei, X.S. Tian and James W. Modestino, "Network-Aware Source-Adaptive Video Coding for Wireless Applications", Invited paper, To appear in *MILCOM 2004*.
3. Y. Pei, J.W. Modestino, Q. Qu and X.Wang, "Enabling Real-Time H.26L Video Services over Wireless Ad Hoc Networks Using Power Control", in Proceeding of *SPIE Visual Communications and Image Processing (VCIP'03)*, pp. 1741-1751, 2003.
4. Y. Pei and J.W. Modestino, "Interactive Video Coding and Transmission Over Wired-to-Wireless Networks Using Edge Proxy", in Proceeding of *IEEE International Conference on Multimedia and Expo (ICME'03)*, pp. 437-440, 2003.
5. Y. Pei and J.W. Modestino, "Use of Concatenated FEC Coding for Real-Time Packet Video Over Heterogeneous Wired-to-Wireless IP Networks", in Proceeding of *International Symposium on Circuits and Systems (ISCAS '03)*, vol. 2, pp.840-843, 2003.

Other Selected Publications:

1. Su Yi, Y. Pei and S. Kalyanaraman, "On the capacity of ad hoc wireless networks using directional antennas", in Proceeding of *ACM International Symposium on Mobile Ad Hoc Networking and Computing (MobiHoc)*, pp. 108-116, 2003.
2. Y.S. Chan, Y. Pei, Q. Qu and J. W. Modestino, "On Cross-layer Adaptivity and Optimization for Multimedia CDMA Mobile Wireless Networks", Invited paper, *The First IEEE-EURASIP International Symposium on Control, Communications, and Signal Processing*, March 2004.
3. Y. Pei, J.W. Modestino and Q. Qu, "Support of Packet Video over Ad Hoc Wireless Networks", in Proceeding of *The 37th Asilomar Conference on Signals, Systems, and Computers*, Nov. 2003.
4. Y. Pei, J.W. Modestino and X.Wang, "On the Capacity of Hybrid Wireless Networks Using an L-maximum-hop routing strategy", in Proceeding of *IEEE Vehicular Technology Conference (VTC-2003/Fall)*, Oct, 2003.
5. Q. Qu, Y. Pei and J.W. Modestino, "Robust H.26L video Coding and Transmission over Bursty Packet Loss Wireless Networks", in Proceeding of *IEEE Vehicular Technology Conference (VTC-2003/Fall)*, Oct, 2003.
6. Y. Pei and J.W. Modestino, "H.263+ Packet Video Over Wireless IP Networks Using Rate-Compatible Punctured Turbo (RCPT) Codes with Joint Source-Channel Coding", in Proceeding of *International Conference on Image Processing (ICIP'02)*, vol. 1 pp.541-544, 2002.
7. Y. Pei and J.W. Modestino, "Robust Video Transmission Over Heterogeneous Wired-to-Wireless Networks Using ALF Together with Edge Proxies", in Proceeding of *the European Wireless 2002 (EW2002)*, Florence, Italy, Feb. 2002
8. Y. Pei and J.W. Modestino, "Multi-layered Video Transmission over Wireless Channels using an Adaptive Modulation and Coding Scheme", in Proceeding of *International Conference on Image Processing (ICIP'01)*, vol. 2. pp.1009-1012, Thessaloniki, Greece, Oct. 2001.
9. Y. Pei and J.W. Modestino, "A Joint Source-Channel Coding Approach for Packet Video Transport over Wireless IP Networks", in Proceeding of *the 11th International Packet Video Workshop (PV2001)*, pp. 41-50, Kyongju, Korea, Apr. 2001.
10. M. Bystrom, J.W. Modestino and Y. Pei, "Combined Source-Channel Coding for Wireless Transmission of H.263 Coded Video", in UCSD Conference on Wireless Communications, pp. 36-49, San Diego, CA, Feb. 1999.

Recent Collaborators:

J.W. Modestino, P. Rha, University of Miami; S. Kalyanaraman, P. Dutta, K. Connor, Rensselaer Polytechnic Institute; O. Garcia, B. Wang, Wright State University; J. Daigle, University of Mississippi; M. Bystrom, Boston University; M. F. Bocko, University of Rochester.

Graduate Advisor: J.W. Modestino, Rensselaer Polytechnic Institute

Graduate Students: Viraj Ambetkar and Peng Xie, Wright State University; Q. Qu, X. Yu and X. Wang, University of Miami.