

# Henning Schulzrinne

Julian Clarence Levi Professor of Computer Science	
Dept. of Computer Science	work phone: +1 212 939 7042
Columbia University	fax: +1 212 666 0140
New York, NY 10027	email: <a href="mailto:hgs@cs.columbia.edu">hgs@cs.columbia.edu</a>
USA	WWW: <a href="http://www.cs.columbia.edu/~hgs">http://www.cs.columbia.edu/~hgs</a>

## Professional Preparation

Ph.D., Univ. of Massachusetts Amherst, 1992, Elect. Engineering (J. Kurose, D. Towsley, C. Cassandras).

M.S., Univ. of Cincinnati, 1987, Electrical Engineering (P. A. Ramamoorthy)

B.S.EE, B.S. IE, Technical University of Darmstadt, Germany, 1984.

## Appointments

2009–: Julian Clarence Levi Professor of Computer Science

2004-2009: Chair, Department of Computer Science

1996–: Professor of Computer Science and Electrical Engineering, Columbia University

1994-1996: Member of research staff and associate dept. head, GMD Fokus, Berlin

1992-1994: Member of technical staff, AT&T Bell Laboratories

1987-1992: Research Assistant, University of Massachusetts, Amherst

## Background

Henning Schulzrinne heads the Internet Real-Time Laboratory. His research program has contributed to the areas of Internet multimedia, Internet telephony, performance evaluation, network security and packet scheduling. Internet protocols co-developed by him are used in international standards, including the common protocol for exchanging multimedia streams across the Internet and protocols for establishing Internet telephony calls as well as Internet multimedia-on-demand streams.

## Five Most Closely Related Publications

H. Schulzrinne, H. Tschofenig, A. Newton, and T. Hardie, “LoST: a protocol for mapping geographic locations to public safety answering points,” in *The First International Workshop on Next Generation Networks for First Responders and Critical Infrastructure*, (New Orleans, Louisiana, USA), Apr. 2007.

H. Tschofenig, H. Schulzrinne, A. Newton, and M. Shanmugam, “Protecting First-Level responder resources in an IP-based emergency services architecture,” in *The First International Workshop on Next Generation Networks for First Responders and Critical Infrastructure*, (New Orleans, Louisiana, USA), Apr. 2007.

M. Mintz-Habib, A. Rawat, H. Schulzrinne, and X. Wu, “A VoIP emergency services architecture and prototype,” in *International Conference on Computer Communications and Networks (ICCCN)*, (San Diego, California), IEEE, Oct. 2005.

H. Schulzrinne and K. Arabshian, “Providing emergency services in Internet telephony,” *IEEE Internet Computing*, Vol. 6, pp. 39–47, May 2002.

W. Jiang, J. Lennox, H. Schulzrinne, and K. Singh, “Towards junking the PBX: deploying IP telephony,” in *Proc. International Workshop on Network and Operating System Support for Digital Audio and Video (NOSSDAV)*, (Port Jefferson, New York), June 2001.

## Five Other Significant Publications

J. Rosenberg, L. Qiu, and H. Schulzrinne, “Integrating packet FEC into adaptive voice playout buffer algorithms on the Internet,” in *Proceedings of the Conference on Computer Communications (IEEE Infocom)*, (Tel Aviv, Israel), Mar. 2000.

P. Pan, E. Hahne, and H. Schulzrinne, “BGRP: sink-tree-based aggregation for inter-domain reservations,” *Journal of Communications and Networks*, Vol. 2, pp. 157–167, June 2000.

J. Rosenberg, H. Schulzrinne, G. Camarillo, A. Johnston, J. Peterson, R. Sparks, M. Handley, and E. Schooler, “SIP: session initiation protocol,” RFC 3261, Internet Engineering Task Force, June 2002.

H. Schulzrinne, A. Rao, and R. Lanphier, “Real time streaming protocol (RTSP),” RFC 2326, Internet Engineering Task Force, Apr. 1998.

H. Schulzrinne, S. Casner, R. Frederick, and V. Jacobson, “RTP: a transport protocol for Real-Time applications,” RFC 1889, Internet Engineering Task Force, Jan. 1996.

## Synergistic Activities

Editor: *Computer Communications*, *IEEE/ACM Transactions on Networking* (2000–2008), *IEEE Transactions on Image Processing* (1999–2001), *Journal on Communications and Networks* (1998–2008), *ACM Transactions on Multimedia Computing, Communications, and Applications*, *IEEE Internet Computing* (1996–1999, 2007–2009).

*IEEE Communication Surveys*, *IEEE Communications Magazine* series editor (1996–1998), guest editor for *IEEE Journal on Selected Areas in Communications*.

General chair, *ICNP’09*, *P2P’09*, *IPTComm’07*, *CoNext’07*, *ACM Multimedia’04*; Technical program co-chair, *IFIP/TC6 NETWORKING’09*, *Infocom’00*; vice general chair, *Infocom’98*.

Program committees: *IEEE Infocom* 1994–2010; *Network and Operating System Support for Digital Audio and Video* (NOSSDAV), 1997–2010; *IEEE Global Internet*, 1997–2004 (selection)

Current boards/panels: Internet2 AMSAC advisory board. Past: Internet Architecture Board (IAB); member-at-large, Board of Governors, IEEE Communications Society; co-chair, Internet Technical Committee of the IEEE Communications Society; chair, IEEE Communications Society Technical Committee on Computer Communications.

## Collaborators & Other Affiliations

Collaborators (outside Columbia): Keith Ross, Brooklyn Poly; Jack Brassil, Hewlett Packard; Tom LaPorta.

Thesis Advisor: James F. Kurose, Donald Towsley.

Thesis Advisees: Jonathan Rosenberg, Cisco; Xin Wang, SUNY Buffalo; Maria Papadopouli, UNC; Ping Pan, Juniper; Wenyu Jiang, Dolby Labs; Lisa Amini, IBM Research; Kundan Singh, Adobe; Weibin Zhao, ask.com; Xiaotao Wu, Avaya Labs.