# Dale A. Harris

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#### Summary

Dale A. Harris is currently Professor of Engineering Education and Executive Director of Engineering Dale A. Harris is currently Professor of Engineering Education and Executive Director of Engineering Professional Education at Purdue University. The Division of Engineering Professional Education offers degree credit and professional development courses, master's degree programs, and other educational opportunities to engineers studying both on campus and at a distance. His research interests involve the use of high-speed networks and the internet in teaching and learning, with particular emphasis on distance education. His teaching responsibilities include the course "Globalization and Engineering" which examines globalization and its impact on the engineering profession from the perspectives of history, economics, technology, innovation, and value chain management. Previously at Stanford University, Dr. Harris served as Director of Experimental E-Learning, Consulting Professor of Electrical Engineering, Chief Technologist for the Stanford Learning Lab, and as the founding Executive Director of the Center for Telecommunications Research. Before joining Stanford, Dr. Harris held executive and management positions with Pacific Bell, Bank of America, and the Department of the Army. In addition to Purdue and Stanford, he has served on the faculties of the Harvard Medical School and the University of Phoenix, and on the visiting faculties of the California Institute of Technology and of Hokkaido University. Dr. Harris received his undergraduate degree from the University of Texas at Austin and his graduate degrees from the University of California at Berkeley. He is active within several professional organizations including the New York Academy of Sciences, the IEEE, the UCEA, the ASEE, and the Alfred P. Sloan Consortium on Asynchronous Learning. Dr. Harris has served on the Board of Governors of the IEEE Communications Society and as the society's Education Director. He has consulted on several startup ventures and previously was Chairman of the Board of LabMentors, a company providing e-learning services supporting hands-on laboratory training over the internet.

#### Education

Electrical Engineering and Computer Science University of California at Berkeley, 1972
Electrical Engineering and Computer Science University of California at Berkeley, 1969
Engineering Science University of Texas at Austin, 1968
Executive Director, Engineering Professional Education, Purdue University
Professor, Engineering Education, Purdue University
Director, Experimental E-Learning, Stanford University Center for Professional Development
Visiting Professor, Hokkaido University, Sapporo, Japan
Chairman of the Board, LabMentors Inc.

1999-2001	Chief Technologist, Stanford University Learning Laboratory
1993-2001	Consulting Professor of Electrical Engineering, Stanford University
1991-1999	Executive Director, Stanford University Center for Telecommunications Research
1991-1993	Acting Professor of Electrical Engineering, Stanford University
1986-1991	Executive Director, Strategic Technology Division, Pacific Bell, San Ramon, CA.
1983-1986	Director, Strategic Technology Assessment, Pacific Bell, San Francisco, CA
1985	Visiting Professor, California Institute of Technology, Pasadena, CA
1981-83	Project Manager, Bank of America, San Francisco, CA
1977-1981	Biomedical Engineer and Chief of Technology Systems, Letterman Army Hospital and Institute of Research, San Francisco, CA
1974-1977	Instructor, Harvard Medical School, Boston, MA
1972-1977	Research Scientist, Harvard Medical School, Boston, MA
1967-68	Laboratory Assistant, Applied Physics Laboratory, Austin, Texas

### **Selected Professional Activities**

Commissioner for International Affairs, University Continuing Education Association; Board of Governors, IEEE Communications Society; Education Director, IEEE Communications Society; Advisory Board, Jasmine Networks, Inc.; Technical Advisory Board, Senvid Corp.; Technical Advisory Board, Gallion Broadband Wireless, Corp.; Year 2000 IEEE Global Communications Conference Technical Program Chairman; Member, Education Committee for IEEE Communications Society; Academic Advisory Council for The Corporation for Educational Network Initiatives in California (CENIC); Scientific Advisory Board, Swedish Institute of Computer Science and the Royal Institute of Technology; Editorial Board, Internetwork Magazine; IEEE 1994 Global Communications Conference Technical Program Chairman; Bellcore Applied Research Advisory Committee; National Technological University Management of Technology Industrial Executive Committee; Exchange Carriers Standards Association International Relations Committee; University of Southern California Communication Sciences Institute Advisory Board; University of California at Davis Department of Electrical Engineering Board of Advisors; Vice Chairman, IEEE 1990 Global Communications Conference Executive Committee.

## **Selected Honors and Awards**

Sloan Foundation Grant

to facilitate economic development in the state of Indiana through distance learning

Sloan Foundation Grant

to increase effectiveness of online learning through development of innovative learning services

Finalist, Bangemann Global Challenge Prize for innovative use of information technology education Sloan Foundation Grant

to develop and implement an on-line degree program in telecommunications

US Distance Learning Association Annual Award for "Most Significant Advancement in Research in the Field of Distance Learning"

Sloan Foundation Grant to develop an asynchronous distance education network and service

Department of the Army Commendation for computer systems development

Muscular Dystrophy Association Fellowship

Delegate to IEEE-USSR Cooperative Program in Information Sciences (Moscow)

NIH Postdoctoral Fellowship

**NIH Biomedical Traineeship** 

Tau Beta Pi

University of Texas Engineering Fellow

NSF Undergraduate Research Fellowship

#### Selected Publications (as of January 1, 2009)

D. A. Harris and C. Krousgrill; "Distance Education: New Technologies and New Directions"; Proceedings of the IEEE Vol. 96, No. 6; June 2008.

J. Bourne, D. A. Harris, and F. Mayadas; "Online Engineering Education: Learning Anywhere, Anytime"; Journal of Engineering Education Vol. 94, No. 1; January 2005.

N. Nishinaga, Y. Nishihori, K. Nagaoka, D. A. Harris, S. Okabe, Y. Yamamoto, and K. Tanaka; "Enabling a Cross-Cultural Collaborative Community: Networking Technologies to Form Meaningful Environments for Higher Education"; Proceedings of the 5th International Conference on Information Technology Based Higher Education and Training; Istanbul, Turkey; 2004.

T. Kikuchi, S. Fukuda, A. Fukuzaki, K. Nagaoka, K. Tanaka, T. Kenjo, and D. A. Harris; "DVTS-Based Remote Laboratory Across the Pacific Over the Gigabit Network"; IEEE Transactions on Education Vol 47, Issue 1, February 2004

D. A. Harris; "E-Learning in United States Colleges and Universities"; Proceeding of the National Conference on Information Processing Education; Sapporo, Japan; 2003.

P. Dev, D. A. Harris, D. Gutierrez, A. Shah, and S. Senger: "End-to-end Performance: Measurement of Internet Based Medical Applications", Proceedings of the American Medical Informatics Association (AMIA) Annual Symposium; November, 2002.

D. Gutierrez, D.A, Harris D, and A. Shah (2002). "Stanford Researchers Prepare to Use Internet2 to Train Medical Students". CENIC Today, Vol. 5, Issue 3, March 2002.

D. A. Harris and C. Desmond; "Communications Society Education Activities"; IEEE Communications Magazine vol. 41, no. 3; March 2003.

D. Gutierrez, A. Shah, and D. A. Harris; "Performance of Remote Anatomy and Surgical Training Applications Under Varied Network Conditions"; Proceedings of ED-MEDIA World Conference on Educational Multimedia, Hypermedia and Telecommunications (Denver); 2002

D. A. Harris, B. Pehrson, Y. Jin, and A. Jonsson; "Distributed Learning on a Global Scale"; ED-Education at a Distance Magazine and Journal; February, 2000

D. A. Harris and A. DiPaolo, "Institutional Policies for Asynchronous Education"; Journal for ALN; May, 1999.

D. A. Harris, "On-line Distance Education in the United States"; IEEE Communications Magazine; March, 1999.

M. Bove, D. A. Harris, and N. Miyaho, Chapter 1 in Multimedia Communications Networks: Technologies and Services; M. Tatipamula and B. Khasnabish, editors; Artech Press, Boston, 1998.

C. Cordero, D. A. Harris, and J. Hsieh, "High Speed Networks for Delivery of Education-On-Demand"; M. Freeman, P. Jardetzky, and H. Vin, editors: Multimedia Computing and Networking; Proc. SPIE 2667, 1996.

D. A. Harris and A. DiPaolo, "Advancing Asynchronous Distance Education Using High-Speed Networks"; IEEE Transactions on Education vol. 39: 444-450, 1996.

D. A. Harris, "Education Takes a Spin on the Information Highway"; ED-Education at a Distance Magazine and Journal, vol. 7, No. 8: 11-14, 1993.

D. A. Harris, "The R&D/Marketing Interface in Local Exchange Companies from the Ground Up"; in M. M. Saghafi and G. L. Frazier, editors: Advances in Telecommunications Management, JAI Press, London, 1990.

D. A. Harris, "Strategic Technology Planning in a Divested Bell Operating Company"; IEEE Communications Magazine vol. 25: 28-35, 1987.

D. A. Harris, "Network Design Tools of the Future"; Proceedings of the 1987 Workshop on Advanced Communications Systems Engineering (Univ. of Southern Calif.): 31-36, 1985.

D. A. Harris and J. J. Shembri, "Implementation of Emerging Technologies Within the Exchange Network"; Proceedings of the Seventh International Conference on Computer Communications (Sydney): 133-138, 1984.

D. A. Harris, "Communications Gateways to the Digital World"; Proceedings of the 1985 Pacific Telecommunications Conference (Honolulu): 231-234, 1985.

D. D. Bikle, R. H. Herman, S. Hull, L. Hagler, D. A. Harris, and B. Halloran, "The Adaptive Response of Humans to Changes in Dietary Calcium: Relationship Between Vitamin D Regulated Intestinal Function and Serum 1,25 Dihydoxyvitamin D Levels"; J. Clin. Endocrinol. Metab. vol. 43: 77-83, 1982.

D. A. Harris and E. Henneman, "Feedback Signals From Muscle and Their Efferent Control"; in V. B. Mountcastle, editor: Medical Physiology (14<sup>th</sup> edition), C. V. Mosbly Company, St. Louis, 1980.

D. A. Harris, "Implications of Recent Government Regulations on Computer Networking"; Proceedings of the International Conference on Military Computing (Montreal): 78-89, 1980.

D. A. Harris and E. Henneman, "Different Species of Alpha Motoneurons in Same Pool: Further Evidence from Effects of Inhibition on Their Firing Rates"; Journal of Neurophysiology vol. 42: 927-935, 1979.

D. A. Harris, "Information Theory in Neurophysiology"; Proceedings of the 1975 IEEE-USSR Joint Workshop on Information Theory (Moscow); 71-82, 1975.

D. A. Harris, "Data Processing in the Cat Motoneuron System: Averaging Functions and Rate Limitation"; Kybernetik vol. 16: 45-52, 1974.

D. A. Harris and L. Stark, "Synaptic Delay: Its Effect on Information Transmission in the Crayfish Caudal Photoreceptor System"; Brain Research vol. 51: 340-344, 1973.

J. C. Houk, D. A. Harris, and J. Hasan, "Non-linear Behavior of Spindle Receptors"; in R. B. Stein, K. G. Pearson, K. G. Smith, and J. B. Redford, editors: Control of Posture and Locomotion, Plenum Publishing, New York, 1973.

D. A. Harris and L. Stark, "Information Theoretical Analysis of a Crayfish Behavioral System"; Brain Research vol. 36: 425-430, 1972.

D. A. Harris and L. Stark, "Information Rate and Capacity in a Crayfish Photoreceptor Nerve Channel"; IEEE Transactions on Systems, Man, and Cybernetics SMC-1: 67-77, 1971.