Todd D. Hodes

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Education

Ph. D. in Computer Science, 2002 (expected)
M. S. in Computer Science, 1997
University of California, Berkeley
GPA: 3.95

B. S. in Computer Science, Applied Mathematics, high honors, 1994
University of Virginia
GPA: Computer Science: 3.97, Applied Mathematics: 3.90, Cumulative: 3.77
SAT: M: 800 V: 690, GRE: Q: 800 A: 800 V: 690, CS subject: 840 (98%)

Honors, Awards, Achievements

- Best Paper Award, 3rd ACM/IEEE International Conference on Mobile Computing, 1997
- Member of University of Virginia Alumni Technology Committee
- California Fellowship in Microelectronics, University of California, Berkeley, 1994-1995
- Louis T. Radar Award, U. Va. Computer Science Department, April 1994
- Finalist, University of Virginia Research & Design Competition, April 1994
- Dean's List, University of Virginia, 1990-1994
- Intermediate Honors, University of Virginia, 1992
- Tau Beta Pi honor society, 1991-1995
- Golden Key honor society, 1992-1995
- National Merit Scholar, 1990
- American Computer Science League (ACSL) All-Star Contest, Individual Competition:
  - Tied for first place in division, 1990, Washington, DC
  - Ranked in top ten in division, 1989, Toronto, Canada
- Duke University Summer Computing Program, Full Scholarship, 1987

Publications

T. Hodes, S. Czerwinski, B. Zhao, A. Joseph, R. H. Katz
"An Architecture for Secure Wide-area Service Discovery"
ACM Wireless Networks Journal, Special Issue
Volume 8, Issue 2/3, March/May 2002, pp. 213-230

M. Munson, T. Hodes, T. Fischer, K. H. Lee, T. Lehman, B. Zhao
"Flexible Internetworking of Devices and Controls"
25th Annual Conference of the IEEE Industrial Electronics Society (IECON),
San Jose, CA, December 1999.

T. D. Hodes, R. H. Katz
"Composable Ad hoc Location-based Services for Heterogeneous Mobile Clients,"
ACM Wireless Networks Journal, Special issue on Mobile Computing
Vol. 5, No. 5, October 1999, pp. 411-427.

T. Hodes, R. H. Katz
"A Document-based Framework for Internet Application Control"
2nd USENIX Symposium on Internet Technologies and Systems
Boulder, CO, October 1999, pp. 59-70.

T. Hodes, J. Hauser, A. Freed, J. Wawrzynek
"Second-order Recursive Oscillators for Musical Additive Synthesis
Applications on SIMD and VLIW Processors,"
International Computer Music Conference (ICMC), Beijing, China, October 1999.

Publications, cont.

S. Czerwinski, B. Zhao, T. Hodes, A. Joseph, R. H. Katz
"An Architecture for a Secure Service Discovery Service"
5th ACM/IEEE International Conference on Mobile Computing
Seattle, WA, August 1999, pp. 24-35.

Steven McCanne, Eric Brewer, Randy Katz, Elan Amir, Yatin Chawathe, Todd Hodes, et. al.
"MASH: Enabling Scalable Multipoint Collaboration"
ACM Computing Surveys, Volume 31, No. 2es, June 1999.

T. Hodes, J. Hauser, A. Freed, J. Wawrzynek, D. Wessel
"A Fixed-point Recursive Digital Oscillator for Additive Synthesis of Audio,"
IEEE International Conference on Acoustics, Speech, and Signal Processing,
Phoenix, Arizona, March 1999.

T. Hodes, M. Newman, S. McCanne, R. H. Katz, J. Landay
"Shared Remote Control of a Videoconferencing Application: Motivation, Design, and Implementation,"
SPIE Multimedia Computing and Networking 1999,
San Jose, California, January 1999, pp. 17-28.

E. Brewer, R. H. Katz, E. Amir, H. Balakrishnan, Y. Chawathe, A. Fox, S. Gribble, T. Hodes, G. Nguyen, V. Padmanabhan, M. Stemm, S. Seshan, T. Henderson
"A Network Architecture for Heterogeneous Mobile Computing,"
IEEE Personal Communications Magazine, October 1998. Invited Paper.

T. D. Hodes, R. H. Katz
"Enabling 'Smart Spaces:' Entity Description and User Interface Generation for a Heterogeneous Component-Based Distributed System,"
DARPA/NIST Smart Spaces Workshop,
Gaithersburg, Maryland, July 1998. pp. 7/44-7/51.
also, UC Berkeley Technical Report CSD/98/1008.

T. D. Hodes, R. H. Katz, E. Servan-Schreiber, L. A. Rowe
"Composable Ad hoc Mobile Services for Universal Interaction,"
3rd ACM/IEEE International Conference on Mobile Computing,
Budapest, Hungary, September 1997, pp. 1-12.
Best Paper award.

T. D. Hodes
"Recursive Oscillators on a Fixed-Point Vector Microprocessor for High Performance Additive Synthesis of Audio,"
MS report, December 1997. also, UCB Technical Report CSD/98/1007.

R. H. Katz, E. A. Brewer, E. Amir, H. Balakrishnan, A. Fox, S. Gribble, T. Hodes, D. Jiang, G. Nguyen, V. Padmanabhan, M. Stemm.
"The Bay Area Research Wireless Access Network (BARWAN),"
41st IEEE Computer Society International Conference (COMPCON), 1996.

W. T. Fennell, Jr., T. Hodes, S. Witherell, C. Goebel, R. Thakkar, T. Schwenk,
"Method of Managing Multi-Player Game Playing Over a Network,"
Patent #5,695,400: BoxerJAM Films, Charlottesville, Virginia (filed 1/96, accepted 12/97).

T. D. Hodes, B. A. McCoy, G. Robins
"Dynamically Wiresized Elmore-Based Routing Constructions,"
1994 IEEE International Symposium on Circuits and Systems,
London, England, May 1994, Volume I, pp. 463-466.

T. D. Hodes
"A Routing Algorithm to Increase the Speed of VLSI Circuits,"
Undergraduate Thesis, University of Virginia,
Charlottesville, Virginia, May 1994.

Work Experience

Graduate Student Researcher, UC Berkeley Computer Science division 1995-
Work on mobile computing & location-based applications [WINET99, USITS99, PersComm98]; multimedia networking [CompSurveys99, MMCN99]; peer-to-peer service location [Mobicom99]; fast sine synthesis techniques with vector instruction sets [ICASSP99]

Technical Staff, Luxxon corporation, San Jose, California. 2000-2001
Worked one day a week assisting with R&D, especially protocols for discovery/negotiation of client device characteristics and media caching

Graduate Internship and Contracting, IBM Almaden Research Center, Almaden, California 1999-2000
Summer internship and follow-up continuing work with the TSpaces middleware project [IECON99]

Graduate Student Instructor, UC Berkeley Computer Science division Fall 1996
Teaching Assistant for *Computer Architecture and Engineering* (CS152), taught by David Patterson and Robert Yung

BoxerJam Films, Charlottesville, Virginia 1994
Assisted the early-stage design and implementation of a multi-platform client/server system communicating via both modems and IP networks. Addressed wide-area latency-hiding and user interface issues. The resulting game, "Strike-A-Match," can be played on America Online (AOL) and Yahoo! [Patent #5,695,400]

Unix Consultant, U. of Virginia Information, Technology, and Communications (ITC) 1993-1994
Answered questions via phone dealing with issues on all the University's available UNIX platforms, including SunOS, AIX, IRIX, and NeXT

HBO & Company, Advanced Technologies Group, Atlanta, Georgia 1991,1993
Designed and implemented interfaces and utilities to assist integrating PC-based client machines with their legacy mainframe (MV/40000) medical system.

Computer Lab Consultant, U. of Virginia Darden Graduate School of Business Administration 1991-1993
Acted as consultant for lab with DOS/Windows and Macintosh machines connected to the campus networks.

Private Tutor, Atlanta, Georgia 1989-1991
Tutored local community college students in mathematics and the sciences.

College Bound, Atlanta, Georgia 1988-1990
Tutored students preparing for the SAT, ACT, SSAT, and school classes; maintained accounting records; developed/edited software (in BASIC) to score tests and evaluate students.