Mark H. Hansen

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`www.stat.ucla.edu/˜cocteau`

Education

1989 – 1994 Department of Statistics, University of California at Berkeley
· Ph.D. Degree in Statistics, 1994
  Dissertation Title: *Extended Linear Models, Multivariate Splines and ANOVA*
· M.A. Degree in Statistics, 1991

1987 – 1989 Department of Mathematics, University of California at Berkeley
· M.S. program (transferred to the Statistics Department)

1982 – 1987 Department of Mathematics, University of California at Davis
· B.S. in Applied Mathematics
  Graduated with High Honors

Research Positions

Professor, Department of Statistics, University of California, Los Angeles	Spring 2009 – Present
Associate Professor of Statistics	Spring 2003 – Spring 2009
Courtesy appointment, Department of Electrical Engineering	Fall 2007
Courtesy appointment, Department of Design|Media Arts	Spring 2003

Projects: · Statistical methods for embedded sensing
 · Participatory urban sensing
 · Non-professional practices of data collection and analysis
 · Text mining and information retrieval

Member of the Technical Staff, Bell Laboratories	Summer 1994 – Winter 2002

Projects: · Web statistics, large data bases
 · Experiments with sound in support of data analysis
 · The practical use of spline spaces for function estimation
 · Quality improvement in IC manufacturing

Invited Visiting Research Positions

School of Operations Research and Industrial Engineering, Cornell University	February – April, 1999
Institute for Statistics and Econometrics, Humboldt-Universität zu Berlin	March, 1997
Australian Graduate School of Management, University of New South Wales	November, 1996

Advising

PhD Students

Nathan Yau (Stat), Andrew Baek (Stat, 2006), Sheela Nair (Stat, 2009), Adam Sugano (Stat, 2008)

MFA Students

Jihyun Kim (DMA, 2008), Aaron Siegel (DMA, 2008)

PhD Committees

Chen Avin (CS, 2005), David Browne (EE, 2007), Neda Farzinnia (Stat, 2006), Brian Fulkerson (CS), Sushrut Gautam (Math), Sabrina He (Stat, 2005), Mark Hopkins (CS, 2005), Weihua Huang (Stat, 2005), Josh Hyman (CS), Michael Karsh (Stat), Kathy Kong (EE, 2007), Brian Kriegler (Stat, 2006), Mohit Lad (CS, 2006), Hongyan Ma (IS, 2008), Eitan Mendelowitz (CS), Barzan Mozafari (CS), Kevin Ni (EE, 2008), Andrew Parker (CS), Alberto Pepe (IS), Mohammad Rahimi (CS, USC, 2005), Nithya Ramanathan (CS, 2007), Sasank Reddy (EE), Randall Rojas (Stat), Tom Schoelhammer (CS, 2008), Yijing Shen (Stat), Jason Shen (Stat), Dan Shriber (Math, 2008), Shenglin Yang (EE, 2006), Bin Zhang (CS, USC, 2008)

MS Committees

Laura Balzano (EE, 2006), Anna Bargagliotti (Stat, 2007), John Bucci (Stat, 2005), Nabil Hajj Chehade (EE, 2006), Victor Chen (EE, 2007), Jackie Dacosta (Stat, 2006), Matt Kugizaki (Stat), Amarjeet Singh (EE, 2006), Michael Stealey (EE, 2006)

MFA Committees

Christo Allegra (DMA), Sean Dockray (DMA, 2005), Scott Hessels (DMA, 2005), Andrew Hieronymi (DMA, 2006), Aaron Koblin (DMA, 2007), Morrow Pettigrew (DMA, 2007), Chris O'Leary (DMA, 2008)

Publications

Ni, K., Ramanathan, N., Nabil, C., Balzano, L., Nair, S., Zahedi, S., Pottie, G., Hansen, M., and Srivastava, M., "Sensor Network Data Fault Types," Transactions on Sensor Networks (to appear).

Mun, M., Reddy, S., Shilton, K., Yau, N., Boda, P., Burke, J., Estrin, D., Hansen, M., Howard, E., and West,, R. (2009) "PEIR, the Personal Environmental Impact Report, as a Platform for Participatory Sensing Systems Research," The 7th Annual International Conference on Mobile Systems, Applications and Services, Mobisys 2009.

Hyman, J., Hansen, M. and Estrin, D. (2008), "Estimating the Spectral Reflectance of Natural Imagery Using Color Image Features," ImageSense 2008, an ACM Sensys Workshop.

Reddy, S., Shilton, K., Burke, J., Estrin, D., Hansen, M., Srivastava, M. (2008) "Evaluating Participation and Performance in Participatory Sensing," in Proceedings of International Workshop on Urban, Community, and Social Applications of Networked Sensing Systems - UrbanSense08.

Shilton, K., Ramanathan, N., Samanta, V., Burke, J., Estrin, D., Hansen, M. and Srivastava, M. (2008) "Participatory Design of Urban Sensing Networks: Strengths and Challenges," in Proceedings of the Participatory Design Conference.

Reddy, S., Burke, J., Estrin, D., Hansen, M., Srivastava, M. (2008) "Determining Transportation Mode On Mobile Phones," in Proceedings of the 12th IEEE International Symposium on Wearable Computers (ISWC).

Mun, M., Estrin, D., Burke J., and Hansen, M. (2008), "Parsimonious Mobility Classification using GSM and WiFi Traces," In Proceedings of the Fifth Workshop on Embedded Networked Sensors (HotEmNets 2008).

Shilton, S., Burke, J., Estrin, D., Hansen, M., and Srivastava, M. (2008) "Participatory Privacy in Urban Sensing," in Proceedings of the International Workshop on Mobile Device and Urban Sensing (MODUS 2008).

Cuff, D., Hansen, M., and Kang, J. (2008) "Out of the woods: Urban sensing," Communications of the ACM, Vol. 51 (3), pages 24-33

Hansen, M., Rubin, B., Steiner, H. C., and Walker, T. (2008) "Words to look at, words to listen to: Designing a 'proliphonic' display for the lobby of the New York Times Building," in Proceedings of the 2008 Linux Audio Conference

E. Agapie, G. Chen, D. Houston, E. Howard, J. Kim, M. Y. Mun, A. Mondschein, S. Reddy, R. Rosario, J. Ryder, A. Steiner, J. Burke, D. Estrin, M. Hansen, M. Rahimi (2008), "Seeing Our Signals: Combining location traces and web-based models for personal discovery," in Proceedings of the 9th IEEE Workshop on Mobile Computing Systems and Applications (HotMobile 2008)

Chen, G., Cho, J. and Hansen, M. (2008) "On the brink: Searching for drops in sensor data," in Proceedings of the 11th International Conference on Extending Database Technology (EDBT08)

Hyman, J., Graham, E., Hansen, M. and Estrin, D. (2007) "Imagers as Sensors: Correlating Plant CO-2 Uptake with Digital Visible-Light Imagery," in Proceedings of the Fourth International Workshop on Data Management for Sensor Networks

Reddy, S., Parker, A., Hyman, J., Burke, J., Estrin, D. and Hansen, M. (2007) "Image Browsing, Processing, and Clustering for Participatory Sensing: Lessons From a DietSense Prototype," in Proceedings of EmNets 07

Singh, A. Batalin, M. Stealey, M. Chen, V., Jordan, B., Fisher, J., Harmon, T., Hansen, M., and Kaiser, W. (2007) "Autonomous Robotic Sensing Experiments at San Joaquin River," in Proceedings of the 2007 IEEE International Conference on Robotics and Automation

Singh, A., Batalin, M., Stealey, M., Chen, V., Hansen, M., Harmon, T., Sukhatme, G., and Kaiser, W. (2007) "Mobile robot sensing for environmental applications," in Proceedings of FSR 2007, the 6th International Conference on Field and Service Robotics

A. Singh, M. Batalin, M. J. Stealey, B. Zhang, Amit Dhariwal, B. Stauffer, S. Moorthi, C. Oberg, A. Pereira, V. Chen, Y. Lam, D. Caron, M. Hansen, W. J. Kaiser, G. Sukhatme (2007), "Human Assisted Robotic Team Campaigns for Aquatic Monitoring," *Journal of Field Robotics*, Vol. 24 , Issue 11-12, pages 969–989

M. Balazinska, A. Deshpande, M. Franklin, P. B. Gibbons, J. Gray, M. Hansen, M. Liebhold, S. Nath, A. Szalay, V. Tao (2007), "Data management in the worldwide sensor web," *IEEE Pervasive Computing*, Vol. 6, No. 2, pages 30-40

S. Reddy, G. Chen, B. Fulkerson, S.-J. Kim, U. Park, N. Yau, J. Cho, M. Hansen and J. Heidemann (2007), "Sensor-Internet Share and Search: Enabling Collaboration of Citizen Scientists," Workshop for Data Sharing and Interoperability, IPSN 07

S. Tileylioglu, M. Hansen, R. Nigbor (2007), "Elevators as a repeatable excitation source for structural health monitoring in buildings," in Proceedings of the 6th International Workshop on Structural Health Monitoring

M. Hamilton, E. Graham, P. Rundel, M. Allen, W. Kaiser, M. Hansen, and D. Estrin (2007), "New Approaches in Embedded Networked Sensing for Terrestrial Ecological Observatories," *Environmental Engineering Science*, 24(2).

Wallis, J., Borgman, C.L., Mayernik, M.S., Pepe, A., Ramanathan N., and Hansen, M. (2007) "Know Thy Sensor: trust, data quality, and data integrity in scientific digital libraries," in Proceedings of the 11th European Conference on Research and Advanced Technology for Digital Libraries

J. Burke, D. Estrin, M. Hansen, A. Parker, N. Ramanathan, S. Reddy, M. B. Srivastava (2006), "Participatory sensing," in Proceedings of the World Sensor Web Workshop, ACM Sensys 2006, Boulder, Colorado

A. Parker, S. Reddy, T. Schmid, S. Ganeriwal, K. Chang, J. Burke, M. Hansen, M. Srivastava, D. Estrin, V. Pasxon, and M. Allman (2006), "Network System Challenges in Selective Sharing and Verification for Personal, Social, and Urban-Scale Sensing Applications," in Proceedings of the Fifth Workshop on Hot Topics in Networks (HotNets-V)

K. Chang, N. Yau, M. Hansen, and D. Estrin (2006), "SensorBase.org - A Centralized Repository to Slog Sensor Network Data," in Proceedings of the International Conference on Distributed Networks(DCOSS)/EAWMS

N. Ramanathan, L. Balzano, D. Estrin, M. Hansen, T. Harmon, J. Jay, W. Kaiser, G. Sukhatme (2006) Designing Wireless Sensor Networks as a Shared Resource for Sustainable Development, in Proceedings of the First International Conference on Information and Communication Technologies and Development

J. Baek, M. Hansen, R. Nigbor, S. Tileylioglu, (2006) "Elevators as an excitation source for structural health monitoring," in Proceedings of the 4th World Conference on Structural Control Monitoring

S.Ganeriwal, D. Ganesan, M. Hansen, M. B. Srivastava, D. Estrin (2005), "Rate Adaptive Time Synchronization in Sensor Networks," ACM Sigmetrics (poster)

M. Rahimi, M. Hansen, B. Kaiser, G. Sukhatme, D. Estrin (2005), "Adaptive sampling for environmental field estimation using robotic sensors," in Proceedings of IROS 2005

M. Batalin, M. Rahimi, Y. Yu, S. Liu, G. Sukhatme, W. Kaiser, M. Hansen, G. Pottie and D. Estrin (2004), "Call and Response: Experiments in sampling the environment," in Proceedings of ACM SenSys '04

M. H. Hansen and B. Yu (2003), "Minimum description length model selection criteria for generalized linear models," *Science and statistics*, IMS Lecture Notes – Monograph Series, Vol. 40

Nonlinear Estimation and Classification (2003), D. D. Denison, M. H. Hansen, C. C. Holmes, B. Mallick and B. Yu (Editors), Lecture Notes in Statistics, Vol. 171, Springer-Verlag

R. Sen and M. H. Hansen (2003) "Predicting a Web user's next request based on log data," *Journal of Computational and Graphical Statistics*, Vol. 12, No. 1 (Based on this paper, R. Sen won the Student Paper Competition sponsored by the ASA Section on Statistical Computing)

M. H. Hansen and C. Kooperberg (2002) "Spline Adaptation in Extended Linear Models,"(with discussion) *Statistical Science*, Vol. 17, No. 1, pages 2-51

O. D. Patterson and M. H. Hansen (2002), "The impact of tolerance on kill ratio estimation for memory," *IEEE Transactions Semiconductor Manufacturing*, Vol. 15, No. 4, pages 404-410

M. H. Hansen and B. Rubin (2002), "Listening Post," accepted for *ICAD 2002*

M. H. Hansen and E. Shriver (2001) "Using navigation data to improve IR functions in the context of Web search," in Proceedings of CIKM 2001

M. H. Hansen and B. Yu (2001), "Model Selection and the Principle of Minimum Description Length," *JASA*, Vol. 96, No. 454, pages 746-774

T. Hermann, M. H. Hansen and H. Ritter (2001) "Sonification of Markov chain Monte Carlo simulations," in Proceedings of ICAD 2001, Hiipakka, J., Zacharov, N. and Takala, T., Eds., pages 208-216

M. H. Hansen and B. Rubin (2001) "Experiencing information systems through sound," in Proceedings of ICAD 2001, Hiipakka, J., Zacharov, N. and Takala, T., Eds., pages 10-15

B. Rubin and M. H. Hansen (2001), "Yahoo/Bounce," on *State of the Union, 2001*, produced by Elliot Sharp, Electronic Music Foundation, Inc. (Invited contribution to a 3-disc set)

K. August, M. H. Hansen and E. Shriver (2001) "Mobile Web Searching," *Bell Labs Technical Journal*, Vol. 6, pages 84–98

M. H. Hansen and B. Yu (2000), "Wavelet Thresholding via MDL: Simultaneous Denoising and Compression," *IEEE Transactions on Information Theory*, Vol. 45, No. 5, pages 1778-1788

V. N. Nair, M. H. Hansen and J. Shi (2000), "Statistics in Advanced Manufacturing," (Year 2000 Commemorative Vignette on Engineering and the Physical Sciences), *JASA*, Vol. 95, No. 451, pages 1002-1005

M. H. Hansen and B. Rubin (2000), "The audiences would be the artists and their life would be the arts," *IEEE Multi-Media*, Vol. 7, No. 2, pages 6-9

O. Patterson and M. H. Hansen (2000) "The impact of tolerance on kill ratio estimation for memory," in Proceedings of the 2000 IEEE/SEMI Advanced Semiconductor Manufacturing Conference & Workshop (ASMC)

O. Patterson, M. H. Hansen, and T. Henry (1999), "Spatial Analysis of Defect and Electrical Test Wafer Maps for Yield Limiting Defect Reduction," in the Proceedings of SEMATECH

M. H. Hansen and B. Yu (1999), "Bridging AIC and BIC: An MDL Model Selection Criterion," in Proceedings of the IT Workshop on Detection, Estimation, Classification and Imaging

M. H. Hansen and B. Yu (1999), "Assessing MDL in Wavelet Denoising and Compression," in Proceedings of ITW 1999

M. H. Hansen, C. Kooperberg and S. Sardy (1998), "Triogram Models " *JASA*, Vol. 93, pages 101–119

J. M. Chambers, M. H. Hansen, D. A. James and D. Temple Lang (1998), "Distributed Computing with Data: A CORBA-Based Approach," *Computing Science and Statistics*, Vol. 30, pages 518–525

C. Stone, M. H. Hansen, C. Kooperberg, Y. Truong (1997), "Polynomial Splines and Their Tensor Products in Extended Linear Modeling," (with discussion), *The Annals of Statistics*, Vol. 25, No. 4, pages 1371–1470

M. H. Hansen, V. Nair and D. Friedman (1997), "Monitoring Wafer Map Data from Integrated Circuit Fabrication Processes for Spatially Clustered Defects," *Technometrics* Vol. 39, No. 3. (Chosen for the *Technometrics* Invited Session at the Fall Technical Conference in Baltimore, Maryland, 1997)

D. Friedman, M. H. Hansen, V. Nair and D. James (1997), "Model-free estimation of some yield metrics in integrated circuit manufacturing," *IEEE Transactions on Semiconductor Manufacturing*, Vol. 10, No. 3

M. H. Hansen and D. James (1997), "A Computing Environment for Spatial Data Analysis in the Microelectronics Industry," *Bell Labs Technical Journal*, Vol. 2, No. 1, pages 114–129

M. H. Hansen and V. Nair (1996), "Process and Productivity Improvement in Semiconductor Manufacturing," *Computing Science and Statistics*, Vol. 27, pages 3–7

―――――――――――― Patents ――――――――――――

U.S. Patent No. 7,194,454   March, 2007
Method for organizing records of database search activity by topical relevance
with E. Shriver

U.S. Patent No. 6,647,383   November, 2003
System and method for providing interactive dialogue and iterative search functions
to find information
with K. August, C. Chuang, D. Lee, M. McNerney, C. Nohl, P. Ong, E. Shriver, and T. Sizer

U.S. Patent No. 6,449,604   September, 2002
Method for characterizing and visualizing patterns of usage of a Web site by network users (II)
with W. Sweldens

U.S. Patent No. 6,424,745   July, 2002
Method and Apparatus for Object Recognition
with H. Hess, P. Mitra, and G. Thomas

U.S. Patent No. 6,182,097   January, 2001
Method for characterizing and visualizing patterns of usage of a Web site by network users (I)
with W. Sweldens

U.S. Patent No. 6,075,594   June, 2000
System and Method for Spectroscopic Product Recognition and Identification
with D. X. Sun and G. Thomas

U.S. Patent No. 5,240,866   August, 1993
A Method for Characterizing Defects in Integrated Circuits
with D. Friedman, J. R. Hoyer and V. N. Nair

―――――――――――― University Service ――――――――――――

Statistics Department

Vice Chair for Graduate Studies   June, 2003 – present
Faculty Adviser to the Statistics Graduate Student Association   December, 2003 – present
Chair, Admissions Committee   December, 2003 – present
Chair, Ph.D. Curriculum Committee   December, 2003 – April, 2004

University committees

Faculty Executive Committee   Fall, 2008 – present
Graduate Council and Committee on Degree Programs   Fall, 2003 – Spring, 2006

Co-Chair Committee on Degree Programs	Fall, 2005 – Spring, 2006
Review Committee for the Department of Epidemiology	Winter, 2004
Chair, Review Committee for the Department of Management	Winter, 2005
Chair, Review Committee for the Department of Classics	Winter, 2006

--- Professional Service ---

Editorial service

Associate Editor, *Journal of the American Statistical Association*	January, 1999 – April, 2003
Associate Editor, *Technometrics*	October, 1998 – April, 2003
Co-Editor, *Statistical Computing and Graphics Newsletter*	1996 – 2000

Served as a referee for the *Annals of Statistics*, *Journal of the American Statistical Association*, *Journal of the Royal Statistical Society*, *Journal of Computational and Graphical Statistics*, *Technometrics*, *IEEE Transactions on Semiconductor Manufacturing*, *IEEE Transactions on Information Theory*, and the *Scandinavian Journal of Statistics*.

Elected positions

2001 Chair, Statistical Computing Section of the American Statistical Association

1999 JSM Program Chair, Statistical Computing Section of the American Statistical Association

Conference Organization

Co-Organizer, *Explorations in statistics* Undergraduate program in statistics	Summer, 2009
Co-Organizer, *Workshop: Integrating Computing into the Statistics Curricula* University of California, Berkeley, CA	Summer, 2008
Co-Organizer, *Computing in Statistics* Mathematical Sciences Research Institute, Berkeley, CA	Spring, 2007
Co-Organizer, *Data Sharing and Interoperability on the World-wide Sensor Web* Workshop held as part of IPSN07, Cambridge, MA	Spring, 2007
Co-Organizer, *Mathematical Challenges and Opportunities in Sensor Networks* Institute for Pure and Applied Mathematics, UCLA	Winter, 2007
Co-Organizer, *Visualization and its role in the practice of statistics* Undergraduate program in statistics	Summer, 2006
Co-Organizer, *Visualization and its role in the practice of statistics* Undergraduate program in statistics	Summer, 2005
Program committee, *Statistics and Information Technology* 2005 Graybill Conference	Summer, 2005
Program committee, *Workshop on High Dimensional Data Analysis* Institute for Pure and Applied Mathematics, UCLA	Fall, 2004

Co-Organizing committee, *Simulation and Reenactment*	Spring, 2004
Banff New Media Institute	

Co-Organizer, *Workshop on Complexity and Inference*	Spring, 2003
DIMACS Special Year on Computational Information Theory and Coding	

Co-Organizer, *Modern Statistical Computing and Graphics in Academia* Spring, 2001
One day workshop to explore how best to promote and sustain the field of Statistical Computing.

Co-Organizer, *Nonlinear Estimation and Classification* Spring, 2001
A two-week workshop held at the Mathematical Sciences Research Institute (Berkeley, CA) emphasizing interdisciplinary approaches to modeling large, complex data. Proceedings published by Springer-Verlag.

Program committee, *12th International Conference on Scientific and Statistical DBM* July, 2000

Program committee, *Joint Statistical Meetings, Section on Statistical Computing* August, 1999

Co-Organizer, *Statistical Science and the Internet* July, 1998
A mini-conference designed to explore the impact that emerging Internet-related tools will have on the way we communicate statistical ideas.

Member, *IMS committee on New Researchers* 1994 – 1995

Grants and Awards

Co-Principal Investigator, National Science Foundation CNS Grant 2006-2010
NeTS-FIND: Network Fabric for Personal, Social, and Urban Sensing Applications

Co-Principal Investigator, National Science Foundation CNS Grant 2006-2008
NeTS-FIND: Sensor-Internet Sharing and Search

Co-Principal Investigator, National Science Foundation CNS Grant 2005-2008
NeTS-NOSS: Algorithms and System Support for Data Integrity in Wireless Sensor Networks

Co-Principal Investigator, National Science Foundation NSF/STC 2007-2012
Center for Embedded Networked Sensing (CENS)

Co-Principal Investigator, National Science Foundation CNS Grant 2006-2009
Computing in Statistics: Model Courses and Curricula

Media Arts Fellowship, funded by the Rockefeller and Ford Foundations April, 2005
Awarded for *Today*, a collaborative performance piece with B. Rubin

Listening Post received the Golden Nica for Interactive Art at Ars Electronica May, 2004
(winners in other categories included Wikipedia and Creative Commons)

Listening Post received a Webby Award in the category of NetArt May, 2003

Listening Post was nominated for a *Wired Magazine* Rave Award December, 2002

Rockefeller Foundation Grant September, 2002
In support of *Listening Post*, a ten-week installation at the Whitney Museum of American Art

Rockefeller Foundation Grant   May, 2001
In support of *Listening Post*, a two-week installation at the Brooklyn Academy of Music

Co-Principal Investigator, National Science Foundation DMS Grant   1998-2000
Title: Statistical Methods for Process Control and Improvement in Advanced Manufacturing

———————————————— Exhibitions, Reviews and News Coverage ————————————————

<u>Exhibitions and Collections</u>

Exhibitions at the Cartier Foundation, Paris (2009); ARoS Aarhus Kunstmuseum, Aarhus (2009); Reina Sofia, Madrid (2008); The London Science Museum, London (2008-2010); The Yerba Buena Center, San Francisco (2007); The San Jose Museum of Art, San Jose (2005-2006); The Whitney Museum of American Art (2002-2003). Permanent collections and commissions include the San Jose Museum of Art, The London Science Museum and the New York Times.

<u>Reviews and News Coverage</u>

"Art is no longer just a feast for the eyes...", *The Sunday Times*   March, 2008

"Tune in to the glorious gobbledegook of global gabble", *The Times of London*   February, 2008

"Listening to internet chatter", *BBC News*   February, 2008

"A protrait of 100,000 people logged on to a global chatroom", *The Independent*   February, 2008

"Get Me Rebuild", *New York Magazine*   December, 2007

"Moveable Type", *NPR's On the Media*   October, 2007

"News Flows, Consciousness Streams: The Headwaters of a River of words", *The New York Times*   October, 2007

"'Listening Post' brings the Internet into view" *San Francisco Chronicle*   August, 2007

"2007: The year in arts and entertainment" *San Francisco Chronicle*   December, 2007
(Listening Post makes the list of top 10 Arts events in 2007)

"2006: The year in arts and entertainment" *San Francisco Chronicle*   December, 2006
(Listening Post makes the list of top 10 Arts events in 2006)

"Screen Capture" *Architect Magazine*   October , 2006

"Chat room art" *NPR's Here and Now*   February , 2004

Review of *Listening Post* Peter Eleey, *Frieze Magazine*   April, 2003

"Orange and White" Adam Gopnik, *The New Yorker Magazine*   March, 2003

Cover story on *Listening Post*, *The Linux Journal*   March, 2003

"A fly on chat-room walls," Jad Abumrad, *NPR's Weekend Edition Saturday*   February, 2003

Review of *Listening Post* Roberta Smith, *The New York Times*   February, 2003

"Poised between old and New" Eric Gibson, *The Wall Street Journal*   February, 2003

"Listening Post gives bits, bytes the sound of music" M. McFarland, *The Seattle Times* November, 2002

"Making an Opera From Cyberspace's Tower of Babel" Matthew Mirapaul, *The New York Times* December, 2001

Listening Post Jad Abumrad, *NPR's Studio 360* December, 2001

————————————— Invited Talks —————————————

Invited workshop, O'Reilly's Where 2.0 May, 2009

Invited seminar, Wall Street on Demand May, 2009

AISTATS 2009 November, 2009
Keynote address

Statistics in Society Seminar Series, NYU February, 2009
Invited talk on "Data analysis in an expanded field"

11th Annual Japanese-American Kavli Frontiers of Science Symposium December, 2008
Invited talk

Invited seminar, Five Colleges Colloquium, Amherst, MA March, 2008

Invited seminar, Interactive Telecommunications Program, NYU February, 2008

Computation+Journalism Symposium, Georgia Institute of Technology February, 2008
Invited talk on non-professional practices of data collection and analysis

Visualizar Workshop, MediaLab Prado, Madrid November, 2007
Invited talk

Yahoo Design Expo, Sunnyvale, CA August, 2007
Invited presentation on *Moveable Type*

Unblinking Conference, UC Berkeley November, 2006
Presentation with D. Cuff and J. Kang]

National Academy of Sciences, 20th Anniversary Celebration CSTB October, 2006
Invited talk with D. Cuff and J. Kang

Commencement address, Department of Statistics, UC Berkeley May, 2006

Society for Cinema and Media Studies, Vancouver, Canada March, 2006
Invited presentation

Mapping New Knowledge Ecologies Workshop, Design Institute, University of Minnesota February, 2006
Invited talk on embedded sensing

2005 Joint Statistical Meetings of the ASA, Minneapolis, MI   August, 2005

Invited Talk: *Statistical research opportunities in sensor networks*

Organized Invited Session: *Mapping*

Organized Invited Session: *Statistics and the media arts*

Keynote speaker, SIAM Conference on Data Mining   April, 2005

Invited Seminar with Ben Rubin, The Design Institute, University of Minnesota   April, 2004

German-American Frontiers of Engineering Symposium   April , 2004

Invited talk for a meeting organized by the National Academy of Engineering

Invited Talk, Argos Festival, Brussels   October, 2003

Invited Seminar, Art Center College of Design, Pasadena, CA   August, 2003

Invited Seminar, Department of Statistics, UC Berkeley   August, 2003

Art, Technology and Culture Colloquium, UC Berkeley   August, 2003

The Beauty of Collaboration Workshop, Banff New Media Institute   May, 2003

Invited participant and speaker

Workshop on Massive Data Streams   December, 2002

National Academy of Sciences' Committee on Applied and Theoretical Statistics

Distinguished Invited Speaker Series in Computer Science, UBC   October, 2002

BRIDGES Consortium Two, Banff New Media Institute   October, 2002

Invited participant and speaker

IMS Meeting on Mixture Models, Cleveland, OH   June, 2002

Invited talk: Mixtures in telecommunications applications

Spring Research Conference on Statistics in Industry and Technology, Ann Arbor, MI   May, 2002

Invited talk: Data streams

Free Space Symposium, Duke University   February, 2002

Invited panelist discussing the institutional support required for successful Art & Science Collaborations

Next Wave 2001, Brooklyn Academy of Music   December, 2001

Listening Post, a two-week installation rendering in real time thousands of simultaneous conversations on the Web

ArtSci2001, Symposium organized by Art & Science Collaborations   November, 2001

Invited talk on *Listening post* installation

Invited Seminar, UC Davis, Department of Statistics   October, 2001

Invited Seminar, Rutgers University, Department of Statistics   October, 2001

Invited Seminar, Columbia University, Department of Statistics   October, 2001

Invited Seminar, Iowa State University, Department of Statistics — October, 2001

Invited Seminar, Carnegie Mellon University, Department of Statistics — September, 2001

2001 Joint Statistical Meetings of the ASA, Baltimore, MD — August, 2001
Organized Invited Session: *Multisensory Data Representation and Exploration*

33rd Symposium on the Interface: Computing Science and Statistics, Costa Mesa, CA — June, 2001
Invited Talk: *Sound as a tool for data analysis*

Digital H@ppy Hour, The Kitchen, NYC — April, 2001
Sounds of the New, invited presentation with Ben Rubin

Statistical Methodologies in Business Research Conference — April, 2001
Invited Talk: *M-commerce traffic analysis for usability assessment and services creation*

Search Engines: Diversity and Controversy, The Sixth Search Engine Meeting — April, 2001
Invited Talk: *The Information Hidden When Web Searching*

Blur: New Creative Practices Within Developing Technologies — January, 2001
Invited seminar series sponsored by Creative Time and Thundergulch, hosted by The New School
Presentation Title: *Experiencing Information Systems Through Sound*

National Academy of Sciences, Committee on Information Technology and Creativity — November, 2000
Invited Talk: *Art-Technology Collaborations*

34th Annual Conference on Information Sciences and Systems, Princeton University — March, 2000
Invited Talk: *Uncovering Complexity in Data through Sound*

1999 Joint Statistical Meetings of the ASA, Baltimore, MD — August, 1999
Organized Invited Session: *Practical Smoothing*

1999 Joint Statistical Meetings of the ASA, Baltimore, MD — August, 1999
Title: *ASA and the Web*

Invited Seminar, New Jersey Institute of Technology — October, 1998

4th ICSA Statistical Conference, Kunming, China — August, 1998
Invited Talk: *Statistics in Advanced Manufacturing*

1998 Joint Statistical Meetings of the ASA, Dallas, Texas — August, 1998
Invited Talk: *Extended Linear Modeling and the Principle of Minimum Description Length*

Invited Seminar, University of Michigan, Department of Statistics — April, 1998

Invited Seminars, Cornell University, Department of ORIE and Statistics Department — March, 1998

Fall Technical Conference, Baltimore, Maryland	October, 1997

Invited Talk: *Monitoring Wafer Map Data from IC Fabrication Processes for Spatially Clustered Defects*
Technometrics Invited Session

1997 Joint Statistical Meetings of the ASA, Anaheim, California	August, 1997
Title: *Adaptive Knot Splines* 1997 Joint Statistical Meetings of the ASA, Anaheim, California	August, 1997

Organized Invited Session: *Computational Science and the Internet*

Joint Research Conference on Statistics in Industry and Technology, New Brunswick, NJ	June, 1997

Organized Invited Session: *Semiconductor Yield Modeling*

Invited Seminar, The Wharton School, University of Pennsylvania	April, 1997

21. Jahrestagugg der Gesellschaft für Klassifikation e.V., Potsdam, Germany	March, 1997

Invited Talk: *Spline Adaptation in Extended Linear Models*

Invited Seminar, Weierstrass Institute for Applied Analysis and Stochastics	March, 1997
Invited Seminar, University of California at Berkeley Department of Statistics	November, 1996
Invited Seminar, Rutgers University Department of Statistics	September, 1996
1996 Joint Statistical Meetings of the ASA, Chicago, Illinois	August, 1996

Title: *Data Analysis and the Web*

Invited Seminar, University of Illinois at Urbana-Champaign Department of Statistics	April, 1996
Invited Seminar, University of Washington Department of Statistics	February, 1996
IMS WNAR, Stanford, California	June, 1995

Invited Talk: *Bivariate function estimation via spline spaces defined over adaptively constructed triangulations*

27th Symposium on the Interface: Computing Science and Statistics, Philadelphia, PA	June, 1995

Invited Talk: *Process and Productivity Improvement in Semiconductor Manufacturing*

Quality and Productivity Research Conference, Phoenix, Arizona	May, 1995

Invited Talk: *Strategies for Process and Productivity Improvement in IC Manufacturing*

Spring Research Conference on Statistics in Industry and Technology, Chapel Hill, NC	June, 1994

Invited Talk: *Quality and Productivity Improvement in Integrated Circuit Fabrication*

1993 Joint Statistical Meetings of the ASA, San Francisco, California	August, 1993

Invited Talk: *Quality Improvement in Integrated Circuit Fabrication Through Spatial Analysis of Wafer Map Data*

ORSA/TIMS Meeting, San Francisco, California	November, 1992

Invited Talk: *Process Improvement through Statistical Modeling and Data Analysis: An Application to IC Fabrication*