CURRICULUM VITAE of JOYDEEP GHOSH

PRESENT ADDRESS

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http:// ideal.ece.utexas.edu/ghosh

EDUCATION:

1988 Ph.D. in Computer Engineering, Univ. of Southern California. GPA 4/4.
Title: Communication-Efficient Architectures for Massively Parallel Processing. *Advisor:* Prof. Kai Hwang.
1984 M.S. in Computer Engineering, Univ. of So. California. GPA 4/4.
1983 B.Tech in Electrical Engineering, Indian Inst of Technology, Kanpur, India. GPA 9.7/10.

PROFESSIONAL EXPERIENCE:

9/2006-present	Schlumberger Centennial Chair in Electrical Engineering, The University of Texas, Austin.
9/13-present	Courtesy Faculty, IROM Department, McCombs School of Business, UT Austin.
9/11-present	Janey Slaughter Briscoe Centennial Fellow, IC^2 Institute, Austin
9/98- present	**Professor** of Electrical and Computer Engineering, The University of Texas, Austin. Also member GSC, Dept of Computer Sciences and Dept. of Biomedical Engineering, UT.
9/93-8/98	Associate Professor of Electrical and Computer Engineering, The University of Texas, Austin.
9/88-8/93	Assistant Professor of Electrical and Computer Engineering, The University of Texas, Austin.
1/86-5/88	Research Assistant, Lab. for Parallel and Distributed Computing, USC.
Summer '87	Three month Pre-professional research program with the System Interconnections Group, IBM T.J. Watson Research Center, Yorktown Heights, NY 10598.
1983-87	All-University Predoctoral Teaching Fellow, College of Engineering, USC.
Summer '82	Visiting Scholar, Vikram Sarabhai Space Center, Trivandrum, India.

HONORS AND AWARDS:

3/17	2017 Distinguished Clinical Informatics Research Paper Award, AMIA Joint Summits. San Francisco.
6/16	Keynote Speaker, Int'l Symposium on Computer-Based Medical Systems (CBMS 2016), Dublin/Belfast
3/16	Plenary Speaker, Texas FreshAIR, San Antonio
1/16	Keynote Speaker, TACTICS, TCS (Top 3 Global IT Company's Annual Conference), Mumbai.
10/15	Keynote Speaker, ICHI'15, Dallas. Top IEEE venue for Health Informatics.
8/15	Keynote talk at "BIOKDD" workshop with KDD 2015.
6/15	**IEEE Computer Society Technical Achievement Award** for "foundational contributions to multi- learner systems"
8/14	Keynote talk at "Connected Health at Big Data Era" workshop with KDD 2014.
12/13	**Keynote Speaker**, ICDM'13 (#1 IEEE Conference on Data Mining), Dallas
2013	Keynote talks at 2nd Workshop on Data Mining for Medicine and Healthcare (with SDM, May 2013), 1st Workshop on Divergences and Divergence Learning (with ICML, June 2013), and International Workshop on Data Mining for Healthcare (with ICHI, Sept 2013).
6/13	Oluwasanmi Koyejo (Sanmi) receives Amazon **Best Student Paper** Award for "Constrained Bayesian Inference for Low Rank Multitask Learning" (with J Ghosh) at UAI'2013.
5/13	Conf Co-Chair, SIAM Int'l Conf. on Data Mining, SDM 2013, Austin TX, May 2013.
11/12	Keynote Speaker, 11th Mexican International Conference on AI, San Louis Potosi, Oct 2012.
4/12	Conf Co-Chair, SIAM Int'l Conf. on Data Mining, SDM 2012, Anaheim, CA, Apr 2012.
1/12	**Best Paper Award.** 17th Asia and South Pacific Design Automation Conf" (ASP-DAC 2012)
9/11	Appointed as Janey Slaughter Briscoe Centennial Fellow, IC^2 Institute, Austin
8/11	**Program Co-Chair**, ACM Conf. on Knowledge Discovery from Databases (KDD'11), San Diego, #1 Data Mining conference.
10/10	**Keynote Speaker**, Int'l on Knowledge Discovery and Information Retrieval (KDIR'10) Valencia,

	Spain, Oct 2010
7/10	**Keynote Speaker**, MultiClust Workshop at KDD'2010, Aug 2010
8/09	**Keynote Speaker and Outstanding Achievement Award**. IEEE International Joint Conference on Bioinformatics, Systems Biology and Intelligent Computing (IJCBS), Shanghai, Aug 2009.
5/09, 6/09	Coauthor of **Best Student Paper** (ICIDT'09, student D. Ding) and Best Student Paper Finalist (ICML'09, student M.Deodhar)
6/08	**Keynote Speaker**, IEEE Int'l Conf on Intelligence and Security Informatics (ISI08), Taipei, June 2008
6/07	**Keynote Speaker** at 2007Int'l Conf on Artificial Intelligence (ICAI'07), Las Vegas, June 2007.
6/07	**Outstanding Achievement Award**, for contributions to Pattern Recognition and Data Mining, at WORLDCOMP'07, Las Vegas, June 2007.
12/06	Honorable Mention (2nd Place) for Best Research Paper at Int'l Conf. Data Mining (ICDM'06), out of 776 submissions.
11/06	**Keynote speaker**, ANNIE'06, St. Louis.
9/06	Appointed the Schlumberger Centennial Chair in Engineering, The University of Texas, Austin.
1/06	Founding Chair, Data Mining Technical Committee, (IEEE Comp Intel. Society), 2005
1/06	Elected **Fellow of IEEE** for contributions to the theory and practice of multi-learner systems
2/05	UT Co-op Society's **2005 Research Excellence Award** (Best Research Paper across all UT Depts).
4/04	**Best Algorithms Paper**, 4th SIAM Int'l Conf. on Data Mining (SDM04), Florida.
12/03	Amiya K Pujari IT Award for **Overall Best Paper** at Sixth Int'l Conf. on Information Technology (CIT'03), Bhubaneshwar.
12/03	(overall) **Best Paper Award** at 1st Indian Conf. on AI (IICAI-03), Hyderabad.
11/03	Outstanding Faculty Award by Class of 2003, Voted by students of Software Engr. Masters Program, UT Austin.
Fall 2003	Dean's Fellowship, Univ. of Texas
6/02	**Keynote Talk**, Multiple Classifier Systems Workshop, Cagliari, Italy.
2/02	IBM Faculty Partnership Award
5/01	Winner 2001 Technology Commercialization "Idea to Product" Competition for XIRS XML search engine, IC^2 / CoE, UT, Austin (Faculty co-Supervisor)
6/99	Supervisor, Plan II Model Thesis Award for "A Neural network based classifier and bio-feedback device for clarinet tone-quality improvement" , UT
1/99	Labanyamayee Das Distinguished Lecturer, I.I.T. Kharagpur, Jan 99.
9/98-current	Archie Straiton Endowed Fellow, UT
4/98	Plenary Presentation, *SPIE Conf. On Appl. and Science of Computational Intelligence*, Orlando.

1/98	Appointed Letters Editor, *IEEE Trans. Neural Networks*.
11/97	**Best Application Paper**, Artificial Neural Networks in Engineering (ANNIE'97) Conference, for "Image Enhancement using Scale-based Clustering Properties of the Radial Basis Function Network".
11/97	**Keynote speaker**, ANNIE'97, St. Louis.
Fall 97	Dean's Fellowship, Univ. of Texas.
7/97	Paper on Motorola Project, presented at Corp. Engineering Council Simulation and Modeling Symp., receives **1996 Best Paper Award** for 10x time reduction.
7/96	Appointed to the Editorial Board, *Neural Computing Surveys*
3/96	Appointed as Associate Editor, *IEEE Trans. Neural Networks*.
3/96	Appointed as Associate Editor, *Int'l Jl. of Smart Engineering Design*
11/95	Runners-up, Best Theory Paper, Artificial Neural Networks in Engineering (ANNIE'95) Conference, for "A Network of Oscillating Neurons for Image Segmentation".
11/95	Second Runners-up, Best Application Paper, Artificial Neural Networks in Engineering (ANNIE'95) Conference, for "Controlling Water Reservoirs Using a Hybrid Intelligent Architecture".
9/94-8/98	Engineering Foundation Endowed Faculty Fellowship in Engineering, UT.
9/94	Engineering Foundation Faculty Award, College of Engineering, UT.
9/93	Award of Excellence from Haliburton Foundation
11/1992	Runner-up, Best Theory Paper, ANNIE '92, St. Louis.
11/1992	Honorable Mention, Best Neural Network Application Paper, WNN'92, Houston.
5/1992	Recipient of the **1992 Darlington Award** from IEEE Circuits and Systems Society for "Reduction of Simultaneous-Switching Noise in Large Crossbar Networks," *IEEE Trans. Circuits and Systems*, January 1991, authored by J. Ghosh and A. Varma. This annual award is for the **overall best paper** among all IEEE publications in the areas of Circuits and Systems.
5/1991	Nominated for 1991 IEEE (overall) Best Paper award, for "Rearrangeable Operation of Large Crosspoint Switching Networks," *IEEE Trans. Communications,* Sept. 1990.
2/1990	Citation from SPIE/SPSE for serving as General Chairman, SPIE Conference on Image Processing Architectures, Santa Clara.
1983-87 U.S.C.	Recipient of a four-year "All-University Predoctoral Merit Fellowship" from the Graduate School, First such awardee in the School of Engineering.
1977-83	Recipient of National Talent Search Scholarship, Govt. of India, for six years.
6/78	Awarded gold medal from Punjab University for standing first in Pre-University examination with record scores.
12/76	Ranked first in State at high school graduation.

MEMBERSHIP IN PROFESSIONAL AND HONORARY SOCIETIES:
Institute of Electrical and Electronic Engineers (IEEE)
International Neural Network Society (INNS)
American Association for Artificial Intelligence (AAAI)
IEEE Systems, Man and Cybernetics Society
ACM SIGKDD

PROFESSIONAL ACTIVITIES:
Editorial Board , Journal of Healthcare Informatics Research, Springer, 2016-current
Editorial Board, *IEEE Transactions on Big Data*, 2015-current.
Editorial Board, ACM Transactions on Knowledge Discovery from Data, 2011-current
Editorial Board, Data Mining and Knowledge Discovery 2011-2016
Editorial Board, Statistical Analysis and Data Mining, 2007-2015.
Editorial Board, Int'l Journal of Computational Intelligence in Bioinformatics and Systems Biology (IJCIBSB), 2008-2014
Editorial Board, International Journal of Computational Biology and Drug Design**,** 2008-current
Editorial Board, Journal of Computational Intelligence in Bioinformatics (JCIB), 2007-2008
Editorial Board, Neural Information Processing, LR, 2003-current
Associate Editor, *Pattern Recognition*, 1992-2005
Associate Editor, *IEEE Transactions on Neural Networks*, 1996-1998
Editorial Board, Neural Computing Surveys, 1996-2000
Associate Editor, *Int'l Jl. of Smart Engineering Design,* 1996-2006
Member, Editorial Board, IEEE Computer Society Press, l990-1993.

Letters Editor, *IEEE Transactions on Neural Networks*, 1998-2000

Visiting Professor, University of Campinas (Unicamp), Campinas, Sao Paolo, Brazil, 2012.
Visiting Professor, University of Minnesota, Minneapolis, 2004.

Founding Chair, Data Mining Technical Committee, (IEEE Comp Intel. Society), 2005
Chair, Data Mining Applications Task Force (IEEE ISATC), 2005

Conference Co-Chair, *13th SIAM Int'l Conf. On Data Mining,* Austin, TX, May 2013
Conference Co-Chair, *12th SIAM Int'l Conf. On Data Mining*, Anaheim, CA, Apr 2012.
Conference Co-Chair, *IEEE Symp., on Computational Intelligence and Data Mining (CIDM07),* Honolulu, Apr 07.
Conference Co-Chair, *Artificial Neural Networks in Engineering (ANNIE'03)*. St. Louis, MO, Nov. 2003
Conference Co-Chair, *Artificial Neural Networks in Engineering (ANNIE'02)*. St. Louis, MO, Nov. 2002
Conference Co-Chair, *Artificial Neural Networks in Engineering (ANNIE'01)*. St. Louis, MO, Nov. 2001
Conference Co-Chair, *Artificial Neural Networks in Engineering (ANNIE'00)*. St. Louis, MO, Nov. 2000
Conference Co-Chair, *Artificial Neural Networks in Engineering (ANNIE'99)*. St. Louis, MO, Nov. 1999.
Conference Co-Chair, *Artificial Neural Networks in Engineering (ANNIE'96)*. St. Louis, MO, Nov. 1996.
Conference Co-Chair, *Artificial Neural Networks in Engineering (ANNIE'95)*. St. Louis, MO, Nov. 1995.
Conference Co-Chair, *Artificial Neural Networks in Engineering (ANNIE'94)*. St. Louis, MO, Nov. 1994.
Conference Co-Chair, *Artificial Neural Networks in Engineering (ANNIE'93)*. St. Louis, MO, Nov. 1993
Conference Co-Chair, *SPIE Conf. on Appl. of Artificial Neural Networks IV*. Orlando, Fl., Apr. 1993.
Conference Co-Chair, *SPIE Conf. on Science of Artificial Neural Networks II*. Orlando, Fl., Apr. 1993.
Conference Chairman, *SPIE Conf. on Image Processing Architectures,* Santa Clara, CA, Feb 11-16, 1990.

Program Co-Chair, *ACM KDD (Knowledge Discovery From Data), Aug 2011*
Program Co-Chair, *ICPR, 2008 (Pattern Recognition),* Tampa, FL, Dec 2008.
Program Co-Chair, *6th SIAM Int'l Conf. On Data Mining*, Bethesda, MD, Apr 2006.

Program Area Chair, *9th SIAM Int'l Conf. On Data Mining*, Sparks, Nevada, Apr 2009.
Program Vice-Chair, *2007 International Conference on Artificial Intelligence (ICAI'07)*, June 25-28, 2007, Las Vegas, USA.
Program Vice-Chair, *The 2007 International Conference on Bioinformatics and Computational Biology (BIOCOMP'07),* June 25-28, 2007, Las Vegas, USA.
Program Vice-Chair, *5th SIAM Int'l Conf. On Data Mining*, Los Angeles, CA, Apr 2005.

Member, Senior PC: ECML, Sept 2010

Member, International Advisory Board 4th World Congress on Nature and Bioinspired Computing (NaBIC 2012), Mexico City, Nov 2012.
Advisory Chair, 2012 International Conference on Awareness Science and Technology (iCAST2012), Seoul, Korea, August 21th – 24th , 2012.
Member, International Advisory Board, The International Conference of Soft Computing and Pattern Recognition (SoCPaR 2009), Dec 2009, Malayasia.
Member, International Advisory Board , World Congress on Nature and Biologically Inspired Computing (NaBIC 2009), New Delhi, Dec 2009.

Honorary General Chair, Int' Jt Conf on Bioinf., Systems Biology and Intel. Computing (IJCBS), Shanghai,Aug 2009.

Member, International Advisory Board, IEEE International Advanced Computing Conference (IACC'09), Patiala, Mar 2009.

Member, Steering Committee, IEEE 7th International Symposium on Bioinformatics & Bioengineering (IEEE BIBE 2007), Boston, Oct 2007

Member, Distinguished International Advisory Board/IAB (Vice-Chairs) of *The 2007 International Conference on Bioinformatics and Computational Biology (BIOCOMP'07), June 2007*.

Member, Distinguished International Advisory Board/IAB (Vice-Chairs) of *The 2007 International Conference on Artificial Intelligence ICAI'07*

Member, Data Mining Technical Committee, (IEEE Comp Intel. Society), 2006-

Member, Technical Committee on Awareness Computing (IEEE SMC), 2009-

Workshop Co-Organizer, HI-KDD 2014 (ACM SIGKDD Workshop on Health Informatics), New York, Aug 2014.

Workshop Co-Organizer, Clustering High Dimensional Data and its Applications" at SDM 2005, Newport Beach, CA, Apr 2005.

Workshop Co-Organizer, *Clustering Large Data Sets"* at *Int'l Conf. on Data Mining* (ICDM 2003) Melbourne, FL Nov 2003.
Workshop Co-Organizer, *Web Analytics*, with 2nt SIAM Int'l Conf. On Data Mining, Washington, DC, Apr 2002.
Tutorials Co-Chair, IEEE 7th International Symposium on Bioinformatics & Bioengineering (IEEE BIBE 2007), Boston, Oct 2007.
Tutorials Chair, *3rd SIAM Int'l Conf. On Data Mining*, San Francisco, May 2003.
Tutorials Chair, *2nd SIAM Int'l Conf. On Data Mining*, Washington, DC, Apr 2002.

Program Co-chair, 1st ITxOT Workshop at IEEE Big Data, San Jose, Oct 2015.
Workshop Co-Organizer, *Web Mining*, with 2nd SIAM Int'l Conf. On Data Mining, Washington, DC, Apr 2002.
Workshop Co-Organizer, *Web Mining*, with 1st SIAM Int'l Conf. On Data Mining, Chicago, Apr 2001.
Workshop Co-Organizer, *Parallel and Distributed Data Mining* (with KDD 2000) Boston , Aug 00
Exhibits Chair, *Int'l Conference on Neural Networks,* Houston, July 1997.
Publications Chair, *KDD 2004,* Seattle, WA, Aug 2004.
Publications Chair, *First Int'l Conf. on Image Processing (ICIP)*, Austin, TX, Nov 1994.
Int'l Liaison, PREMI'05, ISI Kolkata, Dec 2005.
Publicity Chair, PREMI'11, Moscow, June 2011.
Vice-Chairman, IEEE Computer Society, Central Texas Chapter, 1991-1992.

Advisory Board, Handbook of Data Mining, LEA, 2003.
Member of ORNL NE-22 Poject Evaluation Panel, February 2010
Member, Steering Committee, IEEE 7th International Symposium on Bioinformatics & Bioengineering (IEEE BIBE 2007), Boston, Oct 2007.

Guest Editor, Knowledge and Information Systems, Special Issue on Selected and Revised Papers from KDD-2000 Workshop on Distributed and Parallel Knowledge Discovery, vol. 3, no. 4, 2001. (co-edited with Z. Obradovic, H.

Kargupta and V. Kumar)

Participant, NSF proposal review Panel, 1999, 2003, 2004, 2005, 07, 08,10, 11, 12, 14, 15, 17,
Member of DOE "Petascale Computing" panel, 2009, 11
Member, Neural Network Technical Council (NNTC), 2004
Advisory Board, 2010 Intl. Conference on Information Technology & Business Intelligence (ITBI-10) Nagpur Nov. 12-14, 2010

Program Committee Memberships, 2010-current:
PreMi'17, Int. Conf. on Pattern Recognition and Machine Intelligence

MAHA 2016, Methods and Applications for Healthcare Analytics
MLHC 2016 Machine Learning for Healthcare
DMMI2014, 2015, 2016 (AMIA workshop on Data Mining for Medical Informatics)
KDD DDA 2015 (ACM SIGKDD2015 Doctoral Dissertation Award)
AMIA Annual Conference, 2015, 2016
ICHI 2015 (IEEE International Conference on Healthcare Informatics)
2013 IEEE International Conference on Big Data
UAI'13: Uncertainty in AI:2013
International Workshop on Data Mining for Healthcare (DMH 2013)
Workshop on Hospital Readmission Prediction and Clinical Risk Management (HRPCRM 2013)
ACM KDD (Knowledge Discovery From Data): 2010, 2012, 2013, 2014.
SIAM Int'l Conf. On Data Mining: 2010, 2011,
Int'l Workshop on Multiclassifier Systems: 2010, 11, 13, 15
CIDU: 2010, 2011,
ICDM Climate-KD'10
DMHM 2011
IEEE 7th International Symposium on Bioinformatics & Bioengineering (IEEE BIBE 2010)
Workshop on Knowledge Discovery from Sensor Data, with KDD 10

Program Committee Memberships 2005-2009
ACM KDD (Knowledge Discovery From Data): 05, 06, 07, 08, 09
SIAM Int'l Conf. On Data Mining: 06, 07, 08, 09
IEEE Intl. Conf. On Data Mining (ICDM): 05, 07, 08.
Int'l Workshop on Multiclassifier Systems: 05, 07, 09
Artificial Neural Networks in Engineering, 05, 06, 07, 08, 09
AAAI: 05, 07
Web-KDD 05, 07, 2008
Workshop on Knowledge Discovery from Sensor Data, with KDD 07, 08, 09
7th International Conference on Advances in Pattern Recog. (ICAPR09), Kolkata, Feb 2009.
IEEE Intelligence and Security Informatics (ISI-2009), Dallas, June 09.
1st Asian Conference on Machine Learning (ACML'09), Nanjing, Nov 2009
DMMT workshop at KDD 2008, Las Vegas, 2008
IEEE 7th International Symposium on Bioinformatics & Bioengineering (IEEE BIBE 2007), Boston, Oct 2007.
9th International Conference on Data Warehousing and Knowledge Discovery (DaWaK 2007), Regensburg, Germany, Sept 2007.
ICAI'07, June 25-28, 2007, Las Vegas, USA.
"7th International Workshop on Pattern Recognition in Information System" (PRIS 2007), Funchal, Spain, June 2007
International Conference on Computing: Theory and Applications (ISI Platinum Jubilee), ISI Kolkata, March 2007.
AISTATS 2007
ECML, Sept 2006
International Conference on Management of Data (COMAD 2006), Hyderabad, Jan 2006
8th International Conference on Information Technology, Bhubaneswar, India, December, 2005
IICAI'05, Pune, India, Dec 05.

Program Committee, Memberships 2000-2004.
SIAM Int'l Conf. On Data Mining, 2004, 03, 02, 01
Int'l Workshop on Multiclassifier Systems: 2004, 2003, 02, 01, 00

Artificial Neural Networks in Engineering, St. Louis, MO, Nov. 2004, 03, 02, 01, 00
IEEE Intl. Conf. On Data Mining (ICDM), 2004, 2003, 02
Intl Conference on Pattern Recognition 2004, 02, 00
Int'l Jt. Conf. On Neural Networks (IJCNN), Beaverton, OR, July 2003, 02, 01, 00
Web Mining Workshop with KDD, 2004, 03, 02, 01
Pacific Asia Conf. On Knowledge Discovery and Data Mining (PAKDD), 2004, 03,
High Dimensional Clustering Workshop at 4th SIAM Int'l Conf. On Data Mining, 2004, 03.KDD 2004.
CIT-2004, Bhubaneshwar, Dec 2004.
Time Series Workshop with KDD 2004, Seattle, WA, Aug 2004.
Atlantic Web Intelligence Conf (AVIC) 2004, 03
Int'l Conf. On Knowledge Based Intelligent Information and Engr. Systems (KES3), Oxford, UK, Sept 2003.
Intl. Workshop on Distributed Computing (IWDC), Calcutta, Dec 2002.
Enhanced Web Search Wksp with WISE 2002, Singapore, Dec 2002.
Statistical Pattern Recognition (SPR), Ontario, CA, Aug 2002.
2nd Workshop on Temporal Data Mining, held with KDD02, Edmonton, Aug 2002.
Workshop on Ubiquitous Data Mining, held with PKDD, Sept 2001.
Int'l Conf. On Neural Info Processing (ICONIP), Taejon, Korea, Nov 2000.

Program Committee, Memberships Before 2000:
SPIE Conf. on Appl. and Science of Comp. Intelligence/ SPIE Conf. on Appl. of Artificial Neural Networks. 1999, 98, 97, 96, 95, 94
Artificial Neural Networks in Engineering, St. Louis, MO, Nov. 1997, 96, 95, 94, 93, 92
PACT'96, Boston, October 1996.
ICCD '95, Austin, TX October 1995.
Sixth lEEE Symp. Parallel and Distr. Computing, Dallas, TX, Oct. 1994.
Third lEEE Symp. Parallel and Distr. Computing, Dallas, TX, Dec. 1991.
DMCC-5, Charleston, SC, April 1990.

Session Chairman on numerous occasions.

Journal reviewer:
IEEE Trans. Computers, IEEE Computer, IEEE Trans. Neural Networks, Jl. of Parallel and Distributed Computing, IEEE Micro, IEEE Trans. Computer-Aided Design, Int. J. of Computer Aided VLSI Design, IEEE Software, IEEE Trans. Acoustics, Speech and Signal Processing, IEEE Trans. Circuits and Systems, Discrete Applied Mathematics, Jl. of Intelligent Manufacturing, Computer Vision Graphics and Image Processing, Parallel Processing Letters, IEEE Trans. on Power Systems, IEEE Trans. Parallel and Dist. Systems, Jl. of Supercomputing, Pattern Recognition, Machine Vision and Applications, The Computer Journal. Signal Processing Magazine, IEEE Trans. PAMI, Int'l Jl. of Smart Engineering Design,, Jl. of System Architecture (The Euromicro Jl), Intl J. of Microelectronic Systems Integration, IEEE Trans. Elect. and Aerospace Eng., ASME Trans. Jl. Of Dynamical Systems, Measurement and Control, Decision Support Systems, Neural Processing Letters, IEEE Trans. Geosciences and Remote Sensing, Neurocomputing, Neural Computation, IEEE Trans. TKDE, IEEE Trans. CBB, JMLR European Journal of Operational Research,…

Cognizant Editor, "Interconnection Networks: Theory and Practice" by A. Varma and C.S. Raghavendra, IEEE CS Press, Sept. 1992.
Cognizant Editor, "Architectural Alternatives to Extracting Parallelism" by D. Lilja, IEEE CS Press, March 1992.
Cognizant Editor, "Artificial Neural Networks: Concepts", by B.W. Wah and R. Mehra, IEEE CS Press, May 1992.

CONSULTING
I have consulted for a variety of companies rangin from large corporations to start-ups. They include Turner Broadcasting, Motorola, IBM, Interwoven, Iron Mountain, Vinson & Elkins, SSCI, several local companies.

As **co-founder and chief scientist** of Stadia Marketing, I lead successful projects for clients such as Dell, Microsoft, Whole Foods, and several Pharma companies and Ad agencies.

Advisory Boards
Advisory Board Member, Neonyoyo, 2000-1 (acquired by Interwoven)
Advisory Board Member, Cognitive Scale, Feb 2014-present.
Advisory Board Member, Accordion Health, current

Advisory Board Member, Ojolabs, current

PATENTS:
"Spectroscopic Detection of Cervical Pre-cancer using Radial Basis Function Networks",
Holders: K. Tumer, N. Ramanujam, R. Richards-Kortum and J. Ghosh.
Patent 6,135,965, granted 10/24/2000

COMMITTEE ASSIGNMENTS (partial list):
Senior Faculty Search Committee, Member 2015-
Member of McCombs Health Initiative Committee, 2009-present.
Chair, Faculty Annual Evaluation and PTR Committee, 2012
Co-chair, Texas Wireless Summit, 2013
Member of Division of Statistics and Data Science curriculum committee 2011-present
Member, Faculty Annual Evaluation and PTR Committee, 2012
Faculty Search Committee; Member/Chair 2008-09.
Member of University-wide Best Phd Dissertation award Committee, 2010
Member of University-wide Best Research Awards Committee (UT co-op), 2010, 2011
Member, University-wide Best Research Awards Committee (co-op), September 2007-August 2008
Member of Division of Statistics and Scientific Computation 2009-present
Chair, Dept Post-Tenure Review Committee, 2007
Member, Dept Post-Tenure Review Committee, 2006
University Research Excellence Awards Review Panel, 2006
Graduate Studies Committee, Dept of BME, 2005-current.
College of Engr. Information Technology committee, 2001-2008
Faculty Recruiting Committee, 2004-current
Computer Science Dept Graduate Studies Committee, 2002-current.
Ad-hoc committee for recruiting MRC chair/director, 1998-2000
Ad-hoc committee for LRC and ECE/IT review, 2002.
Ad-hoc committee for ACES Building, 1998-2000
Chair, Graduate Admissions in Computer Engineering 1992-1998
College Computer Committee, 1993-2000
Ad-hoc committee for Chairman Selection for ECE Dept, 1997.
Course Area Committee for Digital Systems, 1989-current.
ECE Space Committee, 1993-94.
ECE Operating Committee for Computer Labs 1993
Faculty Mentor, Fall Freshmen, 1990,1991, 1992.
Faculty Mentor, UT Honors Colloquium, 1989,1990, 1994, 1996
Dept. Library Committee, 1989-91.
College Scholastic Appeals Committee, 1989-90
Ad-hoc committee for recruitment of women and minorities, 1989-90.
Ad-hoc committee for CE Ph.D preliminary exams, 1990.
ECE Graduate Studies Committee, 1988-current.

PUBLICATIONS:
Books/Proceedings (Edited)
1. J. Ghosh and C.G. Harrison, (Eds.) *Parallel Architectures for Image Processing,* SPIE Proceedings, Vol 1246, 1990. 325 pages.
2. C.H. Dagli, L.I. Burke, B.R. Fernandez and J. Ghosh (Eds), *Intelligent Engineering Systems Through Artificial Neural Networks, Vol 3*, ASME Press, New York, 1993. 934 pages.
3. C.H. Dagli, L.I. Burke, B.R. Fernandez and J. Ghosh (Eds), *Intelligent Engineering Systems Through Artificial Neural Networks, Vol 4,* ASME Press, New York, 1994. 1230 pages.
4. C.H. Dagli, M. Akay, C.L. Chen, , B.R. Fernandez and J. Ghosh (Eds), *Intelligent Engineering Systems Through Artificial Neural Networks, Vol 5* ASME Press, New York, 1995. 1034 pages.
5. C.H. Dagli, M. Akay, C.L. Chen, , B.R. Fernandez and J. Ghosh (Eds), *Intelligent Engineering Systems Through Artificial Neural Networks, Vol 6* ASME Press, New York, 1996. 1152 pages.
6. C.H. Dagli, A. Buczak, J. Ghosh, M. Embrechts and O. Ersoy (Eds), *Intelligent Engineering Systems Through Artificial Neural Networks, Vol 9* ASME Press, New York, 1999. 1240 pages.
7. C.H. Dagli, A. Buczak, J. Ghosh, M. Embrechts, O. Ersoy and S. Kercel (Eds), *Intelligent Engineering Systems*

Through Artificial Neural Networks, Vol 10 ASME Press, New York, 2000. 1128 pages.

8. J. Srivastava and J. Ghosh (Eds), *Proc. Web Mining Workshop* at SDM 2001, SIAM, 96 pages.
9. C.H. Dagli, A. Buczak, J. Ghosh, M. Embrechts, O. Ersoy and S. Kercel (Eds), *Intelligent Engineering Systems Through Artificial Neural Networks, Vol 11* ASME Press, New York, 2001. 1052 pages.
10. J. Ghosh and J. Srivastava (Eds) , *Proc. Workshop on Web Analytics*, at SDM 2002, Arlington, VA, SIAM, 64 pages.
11. J. Ghosh (Editor). *Tutorial Notes of the 2nd SIAM Int'l Conf. On Data Mining*, Arlington, VA, April 2002, SIAM, 238 pages.
12. H. Kargupta, J. Ghosh, V. Kumar and Z. Obradovic, (guest editors), Special Issue on Distributed and Parallel Knowledge Discovery, (Knowledge and Information Systems), 3(4), Nov. 2001.
13. C.H. Dagli, A. Buczak, J. Ghosh, M. Embrechts, O. Ersoy and S. Kercel (Eds), *Intelligent Engineering Systems Through Artificial Neural Networks, Vol 12* ASME Press, New York, 2002. 1048 pages.
14. J. Ghosh (Editor). *Tutorial Notes of the 3rd SIAM Int'l Conf. On Data Mining*, San Francisco, CA, May 2003, SIAM, 220 pages.
15. D. Boley, I. Dhillon, J. Ghosh and J. Kogan (Eds), Proc. *Workshop on Clustering Large Data Sets"* at *Int'l Conf. on Data Mining* (ICDM 2003) Melbourne, FL Nov 2003, IEEE, pages.
16. R. Kohavi, W. DuMuchel and J. Ghosh, (Eds), *Proc. 10th ACM SIGKDD Int'l Conf on Knowledge Discovery and Data Mining (KDD-2004)*, ACM Press, New York, 2004. (860 pgs).
17. I. Dhillon, J. Kogan and J. Ghosh, (Eds), Proc. *Workshop on Clustering High Dimensional Data and its Applications"* at SDM 2005, Newport Beach, CA, SIAM, 48 pages.
18. J. Ghosh, D. Lambert, J. Srivastava, D. Skillicorn (Eds), Proc *6th SIAM Int'l Conf. On Data Mining*, SIAM, Apr 2006. 646 pages.
19. W. Duch and J. Ghosh (Eds), Proc.,*IEEE Symp., on Computational Intelligence and Data Mining (CIDM07),* IEEE Computational Intelligence Society, 769 pages.
20. T. K. Ho, J. Ghosh and H. Brukhart, Eds, Proc. Intl Conf. on Pattern Recognition, Tampa 2008 (ICPR'08.)
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235. Yubin Park and Joydeep Ghosh, "A Probabilistic Imputation Framework for Regression Analysis using Variably Aggregated, Multi-source Healthcare Data", in *Proc. IHI 2012 : 2nd ACM SIGHIT International Health Informatics Symposium*, Jan 2012.
236. Duo Ding, Bei Yu, Joydeep Ghosh, David Z. Pan, "EPIC: Efficient Prediction of IC Manufacturing Hotspots With A Unified Meta-Classification Formulation", in *Proc. The 17th Asia and South Pacific Design Automation Conference" (ASP-DAC 2012)*, Jan 2012. **Best Paper Award**.

237. A. Mittal, R. Sounderrajan, G. S. Muralidhar , J. Ghosh and A. Bovik, "Unnaturalness Modeling of Image Distortions" in *Proc. VSS-2012*, May 2012.
238. Y. J. Lee, J. Ghosh and K. Grauman, "Discovering Important People and Objects for Egocentric Video Summarization", in *Proc. CVPR*, June 2012.
239. A. Kumar, R Chatwin and J Ghosh, "Simple Unsupervised Topic Discovery for Attribute Extraction in SEM Tasks using WordNet", in *Proc. SemRel2012, with LREC 2012*, Istanbul, May 2012.
240. J. Ho, C Lee and J Ghosh, "Imputation-Enhanced Prediction of Septic Shock in ICU Patients", in *KDD 2012, Health-Informatics Workshop*, Beijing, Aug 2012.
241. Sreangsu Acharyya, Oluwasanmi Koyejo, Joydeep Ghosh, "Learning to Rank With Bregman Divergences and Monotone Retargeting", in *Proc. UAI 2012*, Catalina, Aug 2012, pp. 15-25.
242. J. Ghosh, "Integrated Predictive Modeling of Variable-Resolution Healthcare Data", in *Meaningful Use of Complex Medical Data (MUCMD'12*), Los Angeles, Aug 2012.
243. Sindhu Raghavan, Suriya Gunasekar and Joydeep Ghosh, "Review Quality Aware Collaborative Filtering", in *Proc. 6th ACM Conference on Recommender Systems (RecSys 2012)*, Dublin, Sept 2012.
244. C. H. Lee, N. M. Arzeno, J. Ho, H. Vikalo and J. Ghosh, "An Imputation-Enhanced Algorithm for ICU Mortality Prediction", in *Computing in Cardiology (CinC)*, Sept 2012, pp. 253-256.
245. Anish Mittal, Rajiv Soundararajan, Gautam S. Muralidhar, Alan C. Bovik, and Joydeep Ghosh, Blind Image Quality Assessment without Training on Human Opinion Scores", in *Human Vision and Electronic Imaging XVIII*, SPIE Vol. 8651, Feb 2013.
246. Joyce C. Ho, Yubin Park, Carlos M. Carvalho and Joydeep Ghosh, "DYNACARE: Dynamic Cardiac Arrest Risk Estimation", in *Proc. AISTATS'13*, Apr 2013.
247. M. Park, O. Koyejo, J. Ghosh, J. Pillow and R. Poldrack, "Bayesian Structure Learning for Functional Neuroimaging", in *Proc. AISTATS'13*, Apr 2013.
248. Acharya, Ayan, Hruschka, Eduardo R., Ghosh, Joydeep, Sarwar, Badrul, and Ruvini, Jean-David, "Probabilistic Combination of Classifier and Cluster Ensembles for Non-transductive Learning", in *Proc. SDM 2013*, May 2013, pp.
249. O. Koyejo and J. Ghosh, "A Representation Approach for Relative Entropy Minimization with Expectation Constraints", in *WDDL13*, with *ICML13*, June 2013
250. Yubin Park, Joydeep Ghosh and Mallikarjun Shankar, "LUGS: A Scalable Non-parametric Data Synthesizer for Privacy-Preserving Health Data Publication" in *MLHealth13*, with *ICML13*, June 2013
251. Joyce C. Ho, Yubin Park, Carlos M. Carvalho and Joydeep Ghosh, "DYNACARE-OP: Dynamic Cardiac Arrest Risk Estimation Incorporating Ordinal Features", in *MLHealth13*, with *ICML13*, June 2013
252. Oluwasanmi Koyejo, Priyank Patel, Joydeep Ghosh and Russell A. Poldrack, "Learning Predictive Cognitive Structure from fMRI using Supervised Topic Models", in *Proc. 3rd International Workshop on Pattern Recognition in NeuroImaging*, June 2013,
253. Joyce C. Ho, Yubin Park and Joydeep Ghosh, "Multivariate Temporal Symptomatic Characterization of Cardiac Arrest", in *Proc. IEEE Engineering in Medicine and Biology Society (EMBC'13)*, Osaka, Japan, July 2013, pp. 3222-25
254. C. Lee, O. Koyejo and J. Ghosh," Identifying candidate disease genes using a trace norm constrained bipartite ranking model", in *Proc. IEEE Engineering in Medicine and Biology Society (EMBC'13)*, Osaka, Japan, July 2013, pp. 3459-62.
255. O. Koyejo and J. Ghosh, "Constrained Bayesian Inference for Low Rank Multitask Learning" in Proc. UAI, July 2013 **(Amazon Best Student Paper Award).**
256. O. Koyejo, S. Archaryya, J. Ghosh, "Ratings Re-specification for Rank Ordered Recommendations", in Proc. UAI Workshop: New Challenges in e-Commerce Product Recommendations, July 2013.
257. Joyce Ho, Joydeep Ghosh and K.P Unnikrishnan, "Risk Prediction of a Multiple Sclerosis Diagnosis", *Proc. ICHI*, Sept 2013
258. Luiz Coletta, Eduardo Hruschka, Ayan Acharya and Joydeep Ghosh, "Towards the Use of Metaheuristics for Optimizing the Combination of Classifier and Cluster Ensembles", *BRICS-CCI & CBIC 2013*, Recife, Brazil, Sept 2013
259. Yubin Park, Joydeep Ghosh and Mallikarjun Shankar, "Perturbed Gibbs Samplers for Generating Large-Scale Privacy-Safe Synthetic Health Data", in *Proc. International Workshop on Data Mining for Healthcare*, Sept 2013, Philadelphia. 8 pgs.
260. Suriya Gunasekar, Ayan Acharya, Neeraj Gaur, J. Ghosh, "Noisy Matrix Completion Using Alternating Minimization", *Proc. ECML/PKDD*, Prague, Sept 2013, pp. 194-209.
261. O. Koyejo, S. Archaryya, J. Ghosh, "Retargeted Matrix Factorization for Collaborative Filtering", in *Proc. RecSys*, Hong Kong, Oct 2013, pp. 49-56.

262. O. Koyejo, C. Lee, J. Ghosh, "Gaussian Process Regression with Functional Expectation Constraints," in Proc. ICDM 2013 workshop on Biological Data Mining and its Applications in Healthcare (BioDM), Dallas, Dec 2013
263. A. Acharya, R. Mooooney and J Ghosh, "Multitask Learning with Doubly Supervised Latent Dirichlet Allocation", in *NIPS workshop on Topic Models: Computation, Application, and Evaluation*, Dec 2013
264. S. Gunasekar, J. Ghosh and A.C. Bovik, "Face detection on distorted images using perceptual quality-aware features," *SPIE International Conference on Human Vision and Electronic Imaging,* San Francisco, California, February 2014.
265. KangBok Lee, Yubin Park, Russell Zaretzki, Joydeep Ghosh, "Measuring Brand Inertia through State Space Models: An Application to Scanner Panel Data" in Proc. AMA Winter Marketing Educators' Conference, Feb 14.
266. Yubin Park, Mallikarjun Shankar, Byung-Hoon Park and Joydeep Ghosh "Graph Databases for Large-Scale Healthcare Systems: A Proposal for Efficient Data Management and Service", in *The 5th International Workshop on Graph Data Management, GDM'14*, with ICDE, March, 2014
267. A. Acharya, R. Mooooney and J Ghosh, "Active Multitask Learning Using Both Latent and Supervised Shared Topics", in *Proc. SDM 2014*, Philadelphia
268. Yubin Park, Carlos M. Carvalho and Joydeep Ghosh, "LAMORE: A Stable, Scalable Approach to Latent Vector Autoregressive Modeling of Categorical Time Series", in Proc. AISTATS'14, Apr 2014.
269. S. Gunasekar, P. Ravikumar and J. Ghosh, " Exponential Family Matrix Completion under Structural Constraints", in Proc. ICML'14, June 14,
270. S. Joshi, O. Koyejo and J. Ghosh, "Constrained Inference for Multi-View Clustering, in Proc. ICML Workshop on Multiview Clustering, with ICML'14,
271. S. Acharyya and J. Ghosh, "MEMR: A Margin Equipped Monotone Retargeting Framework for Ranking", in Proc. UAI 2014, July 2014, pp.
272. J. Ho, J. Ghosh and J. Sun, "Marble: High-throughput Phenotyping from Electronic Health Records via Sparse Nonnegative Tensor Factorization", ", in *Proc. KDD 2014*, August 2014, pp. 115-124.
273. Y. Park and J. Ghosh, "LUDIA: An Aggregate-Constrained Low-Rank Reconstruction Algorithm to Leverage Publicly Released Health Data", in *Proc. KDD 2014*, August 2014, pp. 55-64.
274. Joyce Ho, Joydeep Ghosh, and Jimeng Sun, "Extracting Phenotypes from Patient Claim Records using Non-negative Tensor Factorization", in Proc. 2014 Intl. Conference on Brain Informatics and Health (BIH'14), August 2014, pp. 142-151.
275. Y. Park and J. Ghosh, "A Hierarchical Ensemble of alpha-Trees for Predicting Expensive Hospital Visits", in Proc. 2014 Intl. Conference on Brain Informatics and Health (BIH'14), August 2014, pp. 178-187.
276. Oluwasanmi Koyejo, Rajiv Khanna, Joydeep Ghosh, and Russell Poldrack. "On prior distributions and approximate inference for structured variables." In Advances in Neural Information Processing Systems (NIPS), pages 676–684, 2014.
277. J. Sun, J. Ghosh, A. Kho, J. Denny, B. Malin, "High-throughput Phenotyping on Electronic Health Records using Multi-Tensor Factorization", AMIA Phenotyping Workshop at AMIA, Nov 2014
278. J. Ho, J. Lin, B. Gurbaxani, J. Sun, J. Ghosh, " Uncovering medication usage patterns of patients with chronic fatigue syndrome via nonnegative tensor factorization", in Proc. AMIA 2015 Joint Summits on Translational Science, March 2015.
279. R. Chen, J. Sun, J. Ghosh, et al, FHIR-Based Web Services for Computational Phenotyping from Electronic Health Records in Proc. AMIA 2015 Joint Summits on Translational Science, March 2015.
280. Avradeep Bhowmik, Joydeep Ghosh, and Oluwasanmi Koyejo. Generalized linear models for aggregated data. In AISTATS, JMLR: W&CP volume 38, May 2015, pp. 93-101.
281. Rajiv Khanna, Joydeep Ghosh, Russell A. Poldrack, and Oluwasanmi Koyejo. Sparse submodular probabilistic PCA. In AISTATS, JMLR: W&CP volume 38, May 2015, pp. 453-461.
282. S. Acharyya and J. Ghosh, "Parameter Estimation of Generalized Linear Models without Assuming their Link Function", in AISTATS, JMLR: W&CP volume 38, May 2015, pp. 10-18.
283. A. Acharya, J. Ghosh and M. Zhou, "Nonparametric Bayesian Factor Analysis for Dynamic Count Matrices", In AISTATS, JMLR: W&CP volume 38, May 2015, pp. 1-9.
284. Yichen Wang, Robert Chen, Joydeep Ghosh, Joshua Denny, Abel Kho, You Chen, Bradley Malin, and Jimeng Sun, "Rubik: Knowledge Guided Tensor Factorization and Completion for Health Data Analytics", in Proc. KDD, Aug 2015, pp. 1265-1274
285. Ayan Acharya, Dean Teffer, Mingyuan Zhou, Joydeep Ghosh, "Network Discovery and Recommendation via Joint Network and Topic Modeling", in Proc. 6th Social Recommender Systems (SRS 2015) with KDD, Aug 2015.
286. A. Acharya, A. Saha, M. Zhou, D. Teffer, and J. Ghosh, "Nonparametric Dynamic Network Modeling, in Proc. 1st International Workshop on Mining and Learning from Time Series (MiLeTS), with KDD, Aug 2015.

287. A. Acharya, D. Teffer, J. Henderson, M. Tyler, M. Zhou, and J. Ghosh "Gamma Process Poisson Factorization for Joint Modeling of Network and Documents", Proc. ECML/PKDD, Porto, Sept 2015, pp. 283–299.
288. Shalmali Joshi, Joydeep Ghosh, Oluwasanmi Koyejo and Kristine Resurreccion, "Multiple chronic disease prognosis and exploration using clinical notes", in Proc. ICHI, Oct 2015,
289. Avijit Saha, Ayan Acharya, Balaraman Ravindran, Joydeep Ghosh, "Nonparametric Poisson Factorization Machine", in Proc. ICDM, Nov. 2015.
290. Shalmali Joshi, Oluwasanmi Koyejo, Joydeep Ghosh, "Simultaneous prognosis of multiple chronic conditions from heterogeneous EHR data", ICHI, Oct 2015.
291. S. Gunasekar, A. Banerjee and J. Ghosh, "Unified View of Matrix Completion under General Structural Constraints", Proc. NIPS, Dec. 2015.
292. Rajiv Khanna, Joydeep Ghosh, Russell A. Poldrack, Oluwasanmi Koyejo, "A Deflation Method for Probabilistic PCA", in Proc. NIPS 2015 Workshop on Advances in Approximate Bayesian Inference, Dec 2015.
293. J. Henderson, J. Ho and J. Ghosh, "Personalized Diversified Tensor Factorization for Phenotyping", in Proc. NIPS 2015 Workshop on Machine Learning in Healthcare, Dec 2015.
294. Avradeep Bhowmik, Oluwasanmi Koyejo and Joydeep Ghosh, "On Sparse Parameter Recovery for Aggregated Data with Approximate Moments", in Proc. ICML, 2016, June 2016, pp
295. Rajiv Khanna, Joydeep Ghosh, Russell A. Poldrack, and Oluwasanmi Koyejo. "A deflation method for structured probabilistic PCA", In Proc. ICML, 2016, June 2016, pp.
296. Y. Park, J. Ho and J. Ghosh, "ACDC: alpha-Carving Decision Chain for Risk Stratification" to the ICML Workshop on Human Interpretability in Machine Learning (WHI 2016), June 2016.
297. S. Gunasekar, O. Koyejo and J. Ghosh, "Matrix Completion from Partial Rankings", Proc. ICML, 2016, June 2016, pp.
298. S. Joshi, S. Gunasekar, D. Sontag and J. Ghosh, "Identifiable Phenotyping using Constrained Non-Negative Matrix Factorization", Machine Learning for Healthcare (MLHC), Los Angeles, Aug 2016
299. Ryan Bridges, Jette Henderson, Joyce Ho, Byron Wallace and Joydeep Ghosh, "Automated Verification of Phenotypes using PubMed", in Methods and Applications for Healthcare Analytics (MAHA), Seattle, Oct 2016.
300. Taewan Kim and Joydeep Ghosh, "Robust Detection of Non-motorized Road Users using Deep Learning on Optical and LIDAR Data", in 19th IEEE Intelligent Transportation Systems Conference, Rio, Brazil, Nov 2016.
301. Rahi Kalantari, Michael Motro, Joydeep Ghosh, C. Bhat, "A Distributed, Collective Intelligence Framework for Collision-Free Navigation through Busy Intersections", in 19th IEEE Intelligent Transportation Systems Conference, Rio, Brazil, Nov 2016.
302. S. Gunasekar, O. Koyejo and J. Ghosh, "Preference Completion from Partial Rankings", Proc NIPS, Dec 2016,
303. Ryan Bridges, Jette Henderson, Joyce Ho, Byron Wallace and Joydeep Ghosh, "PheKnow-Cloud: A Tool for Evaluating High-Throughput Phenotype Candidates using Online Medical Literature", in Proc. 2017 AMIA Joint Summits on Translational Science. (2017 Distinguished Clinical Informatics Research Paper Award)
304. Avradeep Bhowmik, Joydeep Ghosh, and Oluwasanmi Koyejo. Frequency Domain Predictive Modelling with Aggregated Data. In AISTATS, JMLR: W&CP volume, 2017, pp.
305. "Scalable Greedy Support Selection via Weak Submodularity", in AISTATS,
306. "Projection and Approximate Inference for Structured Sparse Variables" in AISTATS,
307. Rajiv Khanna, Joydeep Ghosh, Russell A. Poldrack, and Oluwasanmi Koyejo. A Deflation Method for Structured Probabilistic PCA", In Proc. SDM, May 2017,
308. Michael Motro, Joydeep Ghosh, Chandra Bhat, "Optimal Alarms for Vehicular Collision Detection", in Proc. 2017 IEEE Intelligent Vehicles Symposium, June 2017.
309.
310.

Book Reviews

Pre-publication review: *Introduction to Data Mining*, by V. Kumar, M. Steinbach and P.-N. Tan, for Addison Wesley, 2004

Pre-publication review: *Imperfect Data Mining* , by R. Pearson, for SIAM Press, 2004

Pre-publication review: *Computer Vision and Fuzzy Neural Systems* , by A. Kulkarni, for Prentice Hall, 2000.

Pre-publication review: *Elements of Neural Networks*, by K. Mehrotra, C.K. Mohan and S. Ranka, for MIT Press, 1995.

Pre-publication review: *Advanced Computer Architecture* by K. Hwang, for McGraw-Hill, 1995.

Pre-publication review: *Foundations of Artificial Neural Networks*, by M. Hassoun, for Academic Press, 1994.

Pre-publication review: *Electronic Logic Circuits,* by J. R. Gibson, presented to John Wiley and Sons, 1991.

Pre-publication review: *Interconnection Networks: Theory and Practice,* by A. Varma and C.S. Raghavendra, presented to IEEE CS Press, 1992.
Pre-publication review: *Architectural Alternatives to Exploiting Parallelism,* by D. Lilja, presented to IEEE CS Press, 1991.
Pre-publication review: *Artificial Neural Networks: Theory* by B.W. Wah and P. Mehra, presented to IEEE CS Press, 1991.
Pre-publication review (with Kai Hwang): *Introduction to Parallel Algorithms,* by M.J. Quinn, presented to McGraw-Hill, 1987.

Misc Publications
Prasanna Desikan, Ritu Khare, Jaideep Srivastava, Robert Kaplan, Joydeep Ghosh, Longjian Liu, Vipin Gopal, "Predictive Modeling in Healthcare: Challenges and Opportunities", in IEEE Life Sciences Newsletter, Nov. 2013.

Technical Reports
I have published over 55 technical reports through
(i) Computer and Vision Research Center, The University of Texas at Austin,
(ii) IBM Research Division, T.J. Watson Research Center, Yorktown Hts, NY 10598,
(iii) Computer Research Institute, University of Southem Califomia, Los Angeles
(iv) Dept. of Computer Science, Univ. of North Texas, Denton.
(v) Parallel and Distributed Systems Lab, The University of Texas at Austin
(iv) Center for Vision and Image Sciences, The University of Texas at Austin
(vii) Dept. of Computer Science, Univ. of Texas at Austin

ORAL PRESENTATIONS:
I have given over 100 oral presentations. Some examples (not including conference and workshop presentations) are:
Fall Creek/Oakridge, Sept 09
Nanjing Univ. and Suzhou Univ., Aug 09
ISI, Kolkata, June 08
Jadavpur Univ, Dec 07, Dec 08.
Bertinoro Italy, Oct 05, Sarnoff Labs, June 06, ISI Kolkata, Aug 06, IISc Bangalore, Aug 06,
"Bregman clustering and co-clustering", Univ of Surrey, June 2004.
"Scalable Clustering of Complex Data" ISI, Kolkata, Dec 2003.
"Distributed Data Mining with Limited Knowledge Sharing" Univ. of Minnesota, Aug 2003; Univ. of Waterloo, Jan 2003
"Scalable Clustering of Complex Data" Univ. of Minnesota, Aug 2003.
"Hierarchical Fusion of Multiple Classifiers for Hyperspectral Data Analysis", Univ. of Minnesota, Aug 2003, NASA Ames, April 2003.
"Mathematical Models of Surfing Behavior", Intel, Hillsboro, OR, July 2003.
"Distributed Data Mining", BAE Systems, Aug 2002.
"Graphical Techniques for Efficient and Balanced Clustering of Very High-Dimensional Data", Invited Talk,
SAS Data Mining Technology Conf, M2001, Cary, NC, Oct 2001.
"Graphical Techniques for Efficient and Balanced Clustering of Very High-Dimensional Data" Keynote Talk, Metricon-2001, Dallas, Sept, 2001.
"Clustering and Visualization of very high-dimensional data", Microsoft Research, June 2001.
"Beyond Personalization", Intel, Portland, May 2001.
"Multistrategy methods for Web Mining", SSCI, Boston, Oct 2000.
"Hybrid Intelligent Systems", Washington State Univ., March 2000.
"Multilearner Systems and Ensembles", Labanyamayee Das Distinguished Lecture, I.I.T. Kharagpur, Jan 99.
"Knowledge Transfer and Reuse", IIT Kharagpur, Jan 99.
"Multi-classifier Systems", ISI Calcutta, Dec 98.
"Ensembles: When many heads are better than one", Plenary talk, ANNIE'97, St. Louis, Nov. 97.
"Multi-learner Systems", Kirtland AFB, Albuquerque, NM, June 1997.
"Adaptive Pattern Recognition", Missile Command (Redstone), Huntsville, Alabama, Apr 1997.
"Ensembles and Committees", Sabre Decision Systems, Dallas, TX, Feb 7, 1997.
"Multi-learner Systems", Washington Univ. St. Louis, Jan. 1997.
"Ensembles: When many heads are better than one", Symp. in honor of Laveen Kanal, U. Maryland, Oct 96.
"Data Compression and Space Object Identification", Phillips Base, Maui, July 96.

"Adaptive Neural Networks for Pattern Recognition", Washington Univ. St. Louis, Nov. 1995.
"Classification of Sonar Transients", ONR workshop of Temporal Patterns, Duke Univ., Apr 30, 1993.
"Higher-order Neural networks for Function Approximation and Classification", invited talk,
NNP2, Theoretical Physics Institute, Minneapolis, August 19, 1992.
"Characteristics and Integration of Local and Global Neural Classifiers", Schluberger Lab. for CS, Austin, July 23, 1992.
"Highly Parallel Processing", Presentation to the Visiting Committee, Dept. of ECE, UT Austin, April 1992.
"Recurrent Global Computation and Distributed Data Structures", Dept. of Computer Science, Univ. of N. Texas, Denton, Jan 20,1992.
"Symmetry in spite of hierarchy", Texas Systems Day, Texas Tech. Univ, Lubbock, Nov. 23, 1991.
"Artificial Neural Network Classifiers", Tracor Applied Sciences, October, 1991.
"Balanced Execution of Global Computations", Univ. of S. Calif., October, 1990.
"Neural Networks for Sequence Processing", IEEE Computer Society, Dallas, Feb 1990.
"A Perspective on Neural Network Techonology", SWRI, San Antonio, June 1989.
"Design of Large Crossbar Switches", MCC, Austin, Dec. 1988.
"Hypemet Architectures for Massively Parallel Processing" IBM, Yorktown Hts. (Jan 88); Bell Labs., Holmdel and Columbus (Mar 88); Univ. of Minnesota (Apr. 88), Syracuse University (Feb 88), Univ. of Texas at Austin (Apr 88), and U. Michigan, Ann Arbor (May 88).
"Parallel Architectures for Connectionist Computation and Vision", IBM Almaden Research Center, Mar. 88.
"Parallel Architectures for AI Processing", Rutgers University, NJ, May 88.

Guest Editor: H. Kargupta, J. Ghosh, V. Kumar and Z. Obradovic, guest editors for Special Issue on Distributed and Parallel Knowledge Discovery, (Knowledge and Information Systems), 3(4), Nov. 2001

SHORT COURSES TAUGHT
Scalable Clustering for Data Mining, WCCI'06, Vancouver, July 06
Unsupervised Learning, Trento, Italy, Oct 2005
Multiclassifier Systems, ISI Kolkata, Dec 2004.
Web Mining, CIT-03, Bhubaneshwar, India, Dec 2004.
Data Mining, ARL-UT, May 2000.
Neural Network Ensembles and Hybrid Systems, Austin Innovation Series, IBM Austin, July 97.
Ensembles and Hybrid Systems, IJCNN Houston, June 1997.
Parallel Processing and Multiprocessors, Texas Instruments, Temple, Jan 22, 1997
Instruction Set Design, Texas Instruments, Temple, Dec 11, 1996.
Module 3: Advanced Computer Architecture, Refresher Course to IBM, Feb 15-17, Austin, 1996 (with Cragon).
Module 2: Computer Architecture, Refresher Course to IBM, Jan 19, Austin, 1996 (with others).
Neural Networks for Spatiotemporal Processing, Tutorial, ANNIE-95, St. Louis, Nov, 1995.
Module 3: Advanced Computer Architecture, Refresher Course to IBM, Nov 10-12, Austin, 1995 (with Cragon).
Module 2: Computer Architecture, Refresher Course to IBM, Oct 13, Austin, 1995 (with others).
Neural Networks for Pattern Recognition, Tutorial, Si'an Ka'an, Playa Del Carmen, Mexico, Sept. 1995.
Module 9: Advanced Computer Architecture, Engineering and Technology Institute, June 8-10, Austin, 1995 (with others).
Module 8: Computer Architecture, Engineering and Technology Institute, May 11-13, Austin, 1995 (with others).
Computer Architecture, (for IBM employees) through Continuing Engineering Studies, College of Engineering, Austin, Jan-March, 1994.
Introduction to Artificial Neural Systems, Institute for Advanced Technology/CES, Nov 9, 11, 1993.
Neural Networks for Spatiotemporal Processing, Tutorial, ANNIE-93, St. Louis, Nov, 1993.
Artificial Neural Networks, through Continuing Engineering Studies, College of Engineering, Dec. 7-9. 1992.
Computer Architecture, (for IBM employees) through Continuing Engineering Studies, College of Engineering, Austin, Sept - Dec 1992.
Introduction to Artificial Neural Systems, Institute for Advanced Technology/CES, Oct 23,24, 1992.

GRANTS AND CONTRACTS:
Co-PI, "Guided Learning", ONR, subcontract through ARL, est. award $1.095 million over 3 years, starting 12/1/16.
(my share = 30%)
PI, "Supervised Constrained Tensor Factorization for Spectral-temporal data", Sandia Natiional Labs, $80,000, 10/1/16-9/31/17
(my share = 100%)

Recipient, faculty research gift of $24,000 from Cognitive Scale, Oct 2016.
(my share = 100%)
Co-PI, "Communications and Radar-Supported Transportation Operations and Planning (CAR-STOP)", (with Chandra Bhat, PI, Robert Heath, Co-PI) TxDOT, $2,053,791, 9/1/16- 2/28/19
(my share = 32%)
Recipient, faculty research gift of $40,000 from Verizon, Inc, Jan 2016
(my share = 100%)
PI, "ONR Topic Modeling", year 3, ONR, subcontract through ARL, $62,672, 11/1/15-10/31/16.
(my share = 100%)
Recipient, faculty research gift of $83,000 from Paypal, Inc, Sept 2015
(my share = 100%)
Recipient, faculty research gift of $54,300 (total) from Cognitive Scale, Spring 15.
(my share = 100%)
Co-PI, "Communications and Radar-Supported Transportation Operations and Planning (CAR-STOP)", (with Chandra Bhat, PI, Robert Heath, Co-PI) TxDOT, $881,377, 4/1/15-8/31/16
(my share = 35%)
Recipient, faculty research gift of $48,000 from Cognitive Scale, Oct 2014
(my share = 100%)
PI, "ONR Topic Modeling", year 2, ONR, subcontract through ARL, $49,194, 11/1/14-10/31/15.
(my share = 100%)
PI, "SCH: INT: Collaborative Research: High-throughput Phenotyping on Electronic Health Records using Multi-Tensor Factorization," NSF, $664K, 09/01/14 - 08/31/18. (collaborative project with Georgia Tech, Vanderbilt and Northwestern, total award $2.15 million)
(my share = 100%)
PI, ""III: Small: Core:," NSF, $496K, 09/01/14 - 08/31/17
(my share = 100%)
Recipient, faculty research gift of $83,000 from Paypal, Inc, July 2014
(my share = 100%)
Recipient, faculty research gift of $15,000 from Cognitive Scale, June 2014
(my share = 100%)
Recipient, faculty research gift of $22,000 from Cognitive Scale, Feb 2014
(my share = 100%)
PI, "ONR Topic Modeling", ONR, subcontract through ARL, $47,324, 11/1/13-10/31/14.
(my share = 100%)
PI, "Best Next Product" USAA, $60,000, 12/12-1/14
(my share = 100%)
PI, "Privacy-Aware Analysis of Healthcare Data" CMS, via ORNL $64,000, 10/12 – 6/13
(my share = 100%)
Recipient, faculty research gift of $15,000 from Yahoo!, Oct 12.
PI, "SK Telecom Data Mining and Data Analysis" SK Telecom, via IC2 Institute $17,000, 09/01/12 – 07/31/13
(my share = 100%)
Recipient, Unrestricted grant of $25,000 from Paypal, to support my research in data mining, Dec 2011.
(my share = 100%)
Recipient, Unrestricted grant of $20,000 from Pervasive Software, to support my research in data mining, Oct 11.
(my share = 100%)
PI, "USAA-Data Mining Project" USAA, via IC2 Institute $30,000, 09/11 – 6/12
(my share = 100%)
Co-PI, "RI: Small: Intelligent Autonomous Video Quality Agents" (with A. Bovik, PI), NSF, $500,000, 9/11-8/14.
(my share 49%)
Recipient, grant of $5,000 from Yahoo! For Seminar Series, Aug 11.
(my share = 100%)
Recipient, Unrestricted grant of $20,000 from Pervasive Software, to support my research in data mining, Oct 10.
(my share = 100%)
Recipient, faculty research grant of $8,560 from Yahoo!, Sept 10.
PI, "III: Small: Simultaneous Decomposition and Predictive Modeling on Large Multi-Modal Data" NSF, $489K, 09/01/10 - 08/31/13
(my share = 100%)

Recipient, Unrestricted grant of $18,000 from Click Forensics, to support my research in web mining, Sept 10.
(my share = 100%)
PI, "SK Telecom Data Mining and Data Analysis" SK Telecom, via IC2 Institute $34,000, 07/08/10 – 01/15/11
(my share = 100%)
Co-PI, "Inter-Agency "Co-opetition" via Hidden Web Databases NHARP, $150,000, 07/10 – 08/12. With G. Das and B. Gao
(my share = $49,570)
Recipient, Grant of $45,000 from UT CSE, for Healthcare Project, Summer '10.
(my share = 100%)
Recipient, grant of $5,000 from Yahoo! For Seminar Series, May 10.
Recipient, Unrestricted grant of $18,000 from Pervasive Software, to support my research in data mining, Feb 10.
(my share = 100%)
Faculty Investigator, "Imaging Science and Informatics Portfolio Program", NIH, approx. $750,000, 5/09-4/14.
(H. Grady Rylander and M. Markey, PIs);
Recipient, research grant of $10,000 from Yahoo!, Oct 09.
Recipient, Unrestricted grant of $18,000 from Pervasive Software, to support my research in data mining, Sept 09.
(my share = 100%)
Recipient, grant of $5,000 from Yahoo! For Seminar Series, Feb 09.
Recipient, Unrestricted grant of $18,000 from Pervasive Software, to support my research in data mining, Feb 09
(my share = 100%)
Recipient, Unrestricted grant of $18,000 from Pervasive Software, to support my research in data mining, Sept 08.
(my share = 100%)
Recipient, Unrestricted grant of $10,000 from Stadia, to support my research in data mining for marketing, March 08
(my share = 100%)
PI, "Advanced learning and integrative knowledge transfer approaches to remote sensing and forecast modeling for understanding land use change" NSF, $290,507 (my share), 09/01/07 - 08/31/10. Collaborative proposal with co-PI's M. Crawford and B. Pijanowski of Purdue, who receive balance of total award of $851K.
(my share = 100%)
PI, "Versatile Co-clustering Analysis for Bi-modal and Multi-modal Data" NSF, $430K, (co-PI Inderjit Dhillon), 09/01/07 - 08/31/10,
(my share = 60%)
Recipient, Unrestricted grant of $30,000 from Stadia, to support my research in data mining for marketing, 10K each: May and Dec 2006, Aug 07.
(my share = 100%)
PI, "A Study of Potential Techniques for Labelling Hierarchically Organized Web Pages", Yahoo, $69,338, 12/24/05-1/15/08.
(my share = 100%)
Co-PI, Advanced Processing and Prototyping Center (AP2C), DARPA, $4.59 mil, 11/22/05 to 11/21/06 (S. K. Banerjee, PI, 17 Co-PIs including Sematech and UT Dallas researchers)
(my share = $35K)
PI, "Research in Latent Variable Modeling for Power Law Graphs", research gift from Google, $37,000, 11/1/05-10/31/08
(my share = 100%)
Recipient, Unrestricted grant of $9,500 from Standards & Poor, NY, to support my research in data mining, Apr 04.
(my share = 100%)
Faculty Investigator, "ITR: Feedback from Multi-Source Data Mining to Experimentation for Gene Network Discovery", NSF, $1.7million, (R. Mooney, PI; Marcotte, Miranker, Dhillon, Iyer), 11/15/03-11/14/07.
(my share = 15%)
PI, "Scalable Clustering of Complex Data", NSF, $255,000, 9/15/03-9/14/06.
(my share = 100%)
PI, "ITR: Extraction and Interpretation of Information from Large-Scale Hyperspectral Data for Mapping and Monitoring Wetland Ecosystems", NSF, $300K, (with Melba Crawford, co-PI), 8/11/03 – 7/31/06
(my share = 50%)
PI, "Modeling of a User's Computing Context and Dynamic Profile for Personal Portals -III", Intel Corp., $75,000, 8/21//02-8/20/03.
(my share = 100%)
Co-PI, "Integrated Sensing: Active Stereoscopic Visual Search Driven by Natural Scene Statistics", NSF, $249,999, (with Bovik, PI, Cormack), 9/1/02-6/31/05

(my share = 30%)

PI, "A practicum in web analytics"**,** Tivoli Teaching Award, $10K, June 02.
(my share = 100%)
PI, "Relating web analytics to system performance and availability metrics"**,** IBM Faculty Partnership Award, $30K, 2/02.
(my share = 100%)
PI, "Design and Control of Large Collections of Learning Agents"**,** NASA, $31,320, 2/15/02-2/24/03.
(my share = 100%)
PI, "Modeling of a User's Computing Context and Dynamic Profile for Personal Portals - II", Intel Corp., $75,000, 10/1/01-9/30/02.
(my share = 100%)
Recipient, Unrestricted grant of $30,000 from HNCS, San Diego, to support my research in XML databases, May 01.
(my share = 100%)
Recipient, Unrestricted grant of $11,000 from Iron Mountain Consulting Services, Boston, to support my research in text and web mining, April 01.
(my share = 100%)
Recipient, Unrestricted grant of $10,000 from Accenture, to support my research in web mining, October 00.
(my share = 100%)
Recipient, Unrestricted grant of $9,000 from Sulekha.com, to support my research in web mining, October 00.
(my share = 100%)
Recipient, Equipment grant valued at about $8000 from Intel Corp., Dec 00.
Recipient, Unrestricted grant of $10,765.90 from Interwoven, to support my research in web mining, October 00.
(my share = 100%)
PI, "Modeling of a User's Computing Context and Dynamic Profile for Personal Portals", Intel Corp., $75,000, 10/1/00-9/30/01.
(my share = 100%)
Co-PI, Equipment Grant: Army Research Office, Computer Vision Systems for Automatic Target Recognition and Automatic Recognition of Human Activities, (with J.K. Aggarwal, PI, A. C. Bovik), DAAD19-00-1-0044, March 1, 2000 February 28, 2001, $90,000.
College of Engineering Matching Funds, $50,000, for ARO DAAD19-00-1-0044
(my share, 25%)
PI, "Instructible Agent Subsystems: Anomaly Detection and Threat Prediction", Raytheon, Inc, $30,000, 9/1/00-1/16/01.
(my share = 100%)
PI , "A Practicum in Data Mining", (with I. Dhillon, Co-PI) Tivoli Systems, Inc, $20,000, 4/18/00-4/17/02
(my share = 50%)
PI, "Towards flexible, scalable "change management" using data mining and AI Techniques, Tivoli Systems, Inc, $30,000, 4/18/00-4/17/02
(my share = 100%)
Recipient, Unrestricted grant of $7,500 from Neonyoyo, Austin, to support my research in web mining, April 00.
(my share = 100%)
PI, "Knowledge Transfer and Reuse in Multiclassifier Systems", NSF, $137,389, 9/15/99-8/31/01.
(my share = 100%)
Recipient, Unrestricted grant of $9,905 from Pavilion Technologies, Austin, to support my research in neural networks for process control, August 99.
(my share = 100%)
Recipient, Unrestricted grant of $10,000 from Knowledge Discovery One, Austin, to support my research in data mining, August 99.
(my share = 100%)
Co-PI, A Practicum in Data Mining", DELL/Lariat, $45,000, 6/99- 12/99 (with L. Stokes, PI).
(my share = $ 22.5K).
PI, Web-based course development in Data Mining, CoE, UT, $5,000, 6/1/99-8/31/99
(my share = 100%)
Co-Investigator, "A Research Center in the Scientific Foundations of Image Representation and Analysis," Multi-university effort with Johns Hopkins University, St. Louis, Harvard, MIT, UT El Paso. UT Austin portion of total contract $392,002, 3/1/99-2/28/01, (with J.K. Aggarwal, PI, and Alan Bovik).

Recepient, “Interactive Modeling and Visualization of Nonlinear Models With Labview Integration” Fluor Daniel Grant, COE, $4400, June 98.
(my share = 100%)
Faculty Investigator, “Multi-paradigm Multisensor Recognition of Articulate and Inanimate Objects”, Army Research Office, DAAG55-98-1-0230, $150,000, 5/98-4/01.
(with J. K. Aggarwal, PI, and K.R. Diller)
Principal Investigator, "Image Processing and Data Compression Tools for Satellite Imaging", Air Force (Phillips Lab), $69,969, June 96 - July 97 (with A.C. Bovik, co-PI).
(my share = $36K+)
Co-PI, "Autonomous Intelligent Machines for Managing Hazardous Environments", Texas Advanced Research Program, $178,915, Jan 1996- Dec 97. (with J.K. Aggarwal, PI).
(my share = $ 72K+)
Principal Investigator, "Application of Pattern Recognition and Neural Networks in Semiconductor Manufacturing", Motorola, Inc., Dec 95-June 96. $21,186.
(my share = 100%)
Investigator, "A Center in the Scientific Foundations of Image Analysis", ARO, Sept 95-Dec 98.
(subcontract with J.K. Aggarwal, PI, A.C. Bovik, $ 677,300; overall grant with other institutions, $ 7.5 million +).
(my share = $ 200K+)
Principal Investigator, "Scalable Processing of Multisensor and Multispectral Imagery", Air Force (Phillips Lab), $60,000, Dec 1994 - Sept 1995. (with A.C. Bovik, co-PI).
(my share = $ 30K)
Co-PI, "Multisensor Tracking and Recognition of Animate and Inanimate Objects", Army Research Office, $300,000, Sept 1994 - Jan 1997. (with J.K. Aggarwal, PI).
(my share = $ 120K+)
Co-PI, "Function-Space Neural Networks for Spatiotemporal Transformation and Pattern Recognition", NSF, $164,338, Feb 1994 - Jan 1997. (with I. Sandberg, PI).
(my share = $ 73K+)
Recipient, a PowerPC workstation from IBM through College of Engineering, Feb 1994, valued at $10,000.
(my share = 100%)
Co-PI, "Local Spatio-Temporal Analysis in Vision Systems", $3,200,151, AFOSR, 4/93-5/97 (with W.S. Geisler, PI, 5 others)
(my share = $ 591K+)
Equipment grant of a Neural Net Development System (INNTs, ETANN) valued at $16,025, from Intel Corp. (with H.W. Smith, P.I., J. Valvano and E. Hixson), March 93.
(my share = $ 4K)
Principal Investigator "Advanced Neural Networks for Sonar Signal Sequences", $130,670, Office of Naval Research/Tracor Applied Sciences, Dec. 1992- Sept. 1995.
(my share = 100%)
Recipient, Unrestricted grant of $17,680 from Schlumberger, Austin, to support my research in neural networks, October 1992.
(my share = 100%)
Recipient Departmental Matching Funds for Visualization Facility, $7,395, 92-ECE-RGONZALEZ, September 1992.
(my share = 100%)
Principal Investigator "Neural Networks for Sonar Signal Classification", $88,404, Naval Ocean Systems Center/Tracor Applied Sciences, June 1992-Dec 1994.
(my share = 100%)
Recipient, Unrestricted grant of $9,000 from Schlumberger, Austin, to support my research in neural networks, April 1992.
(my share = 100%)
Co-Recipient TRW Faculty Assistantship Award from TRW Foundation, $45,000 (with Vijay Garg, co-recipient), March 92- Feb 95.
(my share = $22.5K)
Equipment grant of a 16-node iPSC/860 supercomputer with I/O subsystem, valued at $558,305, from Intel Corp; to support the research of Browne (PI), Werth, Oden, Tasch, Maziar, Carey, Van de Geijn, Ghosh and Aggarwal), March, 1992.
(my share = $50K approx.)
Faculty Investigator "Responsive Networks for High-Performance Computing", (M. Malek, PI) $95,323, Texas Higher Education Coordinating Board, Jan 1992 - Dec 1993,

(my share = $47K+)
Principal Investigator "An Integrated Approach to High-Performance Network Technology", $59,996, NSF (Research Initiation Award), Sept 1990 - August 1992.
(my share = 100%)
Principal Investigator "Hybrid Classifier for Transient Sonar Signals", (with Aggarwal, Co-PI; Powers and Sandberg: Faculty Investigators), $211,000, DARPA/Tracor Applied Sciences, Austin, Nov. 1989 - Oct 1991.
(my share = $110K)
Principal Investigator "Transient Circuit Analysis on a Supercomputer", (with Pillage Co-PI); $44,508, Cray Research, March 90 - April 91.
(my share = $22+K)
Recipient Departmental Matching Funds for Neural Network Simulation Facility, $4,400, 91-ECE-RGONZALEZ, March 1991.
(my share = 100%)
Recipient Challenge for Excellence research supplement, $21,000, Dean R&D, UT, Sept. 1990. (with J.K. Aggarwal and C.L. Wu).
(my share = $7K)
Recipient "Neural Network Simulations", Challenge for Excellence research supplement, $800, Dean R&D, UT, 1990-91,
(my share = 100%)
Principal Investigator "Recognition of Geometric Objects Using Neural Networks", $10,000, University Research Institute, University of Texas, Austin, June 89 - August 89.
(my share = 100%)
Principal Investigator "Design of Multilayered Neural Networks", $5,000, The University Research Institute, University of Texas, Austin, January 89 - August 89.
(my share = 100%)

STUDENT SUPERVISION

1. No index entries found.Yoan Shin, "Efficient Higher Order Feedforward Networks for Function Approximation and Classification," December 1992. (Full Prof, Soong Sil Univ., Seoul)
2. Hung-Jen Chang, "Macroscopic Behavior of Large Neural Systems," May 1993. (Post-Doc, Univ. California, Berkeley with Walter Freeman; now with industry).
3. Jeffrey T. Draper, "Efficient Message Transport in Multicomputer Systems," May 1993. (Information Sciences Institute, CA).
4. Jose Nelson Amaral, "A Parallel Architecture for Serializable Production Systems," Dec 1994. (Full Prof, U. Alberta).
5. Kagan Tumer, "Linear and Order Statistics Combiners for Reliable Pattern Classification," May 1996 (NASA Ames)
6. Srinivasa Chakravarthy, "On the Role of Singularities in Neural Networks," May 1996 (Assoc. Prof, IIT Madras)
7. Turker Kuyel, "Foveated Models for Compression, Segmentation and Classification," Jan 1997 (Texas Instruments, Dallas).
8. Ismail Taha, "A Hybrid Intelligent Architecture for Revising Domain Knowledge", May 1997. (Assoc Prof, Univ. Cairo, MTC).
9. Brian Stiles, "Nonlinear Memory Dynamic Neural Networks for Spatio-Temporal Classification", May 1997 (JPL, Pasadena).
10. Viswanath Ramamurti, "Structurally Adaptation and Generalization in Modular Neural Networks", August, 1997 (Technology Resources Inc (research division of SBC Corp., Austin)
11. Kurt D. Bollacker, “A Supra-Classifier Framework for Knowledge Reuse”, December, 1998 (NEC Research Inst, currently with LongNow Foundation).
12. Kuiyu Chang, “Nonlinear Dimensionality Reduction using Probabilistic Principal Surfaces”, May 2000 (Nanyang Tech. Univ (NTU), Singapore).
13. Shailesh Kumar, “Modular Learning Through Output Space Transformations”, Dec 2000. (HNC/Fair Issac).
14. Alexander Strehl, “Relationship-based clustering and cluster ensembles for high-dimensional data mining”, May 02 (McKinsey)
15. Shi Zhong, “Probabilistic Model-based Clustering of Complex Data”, August 2003. (Asst. Prof, Florida Atlantic Univ.)
16. Adrian Agogino, “Design and Control of Large Collections of Learning Agents”, Dec 2003. (NASA Ames)

17. Arindam Banerjee, "Scalable Clustering Algorithms", Aug 2005 (Univ. of Minnesota, Minneapolis, CS dept).
18. Srujana Merugu, "Privacy Perserving Data Mining using Generative Models", Aug 2006, (Yahoo! Research)
19. Gunjan K. Gupta, "Robust Methods for Locating Multiple Dense Regions in Complex Datasets", Dec 06 (Amazon).
20. Suju Rajan, "Knowledge Transfer Techniques for Dynamic Environments", Dec 06 (Yahoo!)
21. Yangchi Chen, "Knowledge-Based Learning For Classification Of Hyperspectral Data", co-supervised with M.M. Crawford (OR), May 07. (AMD)
22. Kunal Punera, "Enhanced Classification Through Exploitation of Hierarchical Structures, Aug 07, (Yahoo Research).
23. Alexander Liu, "Active Learning in Cost-Sensitive Environments", Dec 09. (Applied Research Labs)
24. Meghana Deodhar, "Simultaneous Partitioning and Modeling: A Framework for Learning from Complex Data", May 2010. (Google).
25. Sri Priya Ponnapalli, "A Higher-Order Generalized Singular Value Decomposition for Comparative and Integrative Analyses of Large-Scale Data with Applications to Genomic Signal Processing" (co-supervised with Orly Alter), Aug 2010 (Bloomberg)
26. Goo Jun, "Transfer Learning for Classification of Spatially Varying Data", Aug 2010, (U. Michigan, Ann Arbor, post-doc, now Faculty at Baylor School of Medicine, Houston).
27. Chase Krumpelman, "Overlapping Clustering", Aug 2010, (Baylor School of Medicine, Houston)
28. Yong-Jae Lee, " Visual Category Discovery in Images and Videos", May 2012. Co-supervised with Kristen Grauman (Post-doc UIUC, now Faculty at UC Davis)
29. Oluwasanmi Koyejo, "Constrained Relative Entropy Minimization with Applications to Multitask Learning", May 2013 (Faculty at Univ. Illinois, Urbana, CS dept)
30. Sreangsu Acharyya, "Learning to Rank in Supervised and Unsupervised Settings using Convexity and Monotonicity", Aug 2013 (Microsoft Research)
31. Yubin Park, "Privacy-aware Publication and Utilization of Healthcare Data", Aug 2014. (Founder and Chief Scientist, Accordion Health)
32. Ayan Acharya, "Knowledge Transfer Using Latent Variable Models", Aug 2015 (CognitiveScale)
33. Joyce Ho, "Clinically Interpretable Models for Healthcare Data", Dec 2015. (Faculty at Emory, CS Dept)
34. Md. Shamsuzzoha Bayzid, "Estimating Species Trees from Gene Trees Despite Gene Tree Incongruence under Realistic Model Conditions". Co-supervised with Tandy Warnow, Aug 2016.
35. Suriya Gunasekar, "Mining Structured Matrices in High Dimensions", Aug 2016. (Research Faculty at TTI and Univ. Chicago).

Ph.D. in progress :
Admitted to candidacy: Dean Teffer, Rajiv Khanna, Shalmali Joshi
Preparing for qualifying exams:, Taewan Kim, Jette Henderson, Avradeep Bhowmik, Woody Austin, Rahi Kalantari, Anish Acharya,

Total M.S. Thesis/Reports completed: 97.5.
UT Students: A. Hukkoo, B. Agarwal, J.T. Draper, H.J. Chang, S.V. Chakravarthy, N. Krishnamurty, A. Chatterjee (co-supervised), K. Tumer, K. Goveas, N. Gangisetti, R. Kennedy, P.E. Soto-Zavaleta, B. Stiles, B.K. Prabhakar, R. Golla, R. Holmberg, R. Gupta, N. Soni, N. Kaniyur, Richard Palmer, Steacy Householder, Kurt Bollacker, Amit Malhotra, A. Hussain, V. Kadakia, J. Eledath, T.-W. Chiang, A. Nag, Arun Goel, M. Venkatraman, Adrian Agogino, Caroline Grosser, Gunjan Gupta, Srujana Merugu, Anuj Khare, Alexandre Hennegue, Siddharth Sriram, Chase Krumpelman, Sumit Taank, Shalini Gupta (co-supervised), Suju Rajan, Alex Liu, Ankur Gupta (co-supervised), Kunal Punera, Meghana Deodhar, Sripriya Ponnapalli, Clinton Jones, Brian Yang, Sankari Dandapani, Sri Vatsava Daruru, Aauyush Sharma, Yubin Park, Nikita Sudan, Ayan Acharya, Suriya Gunasekar, Abhimanu Kumar, Ayan Acharya, Yubin Park
Option III UT Students (Industry): Betsy Luzader, Til Phan, David Vickers, David Alvarez, Margaret Millikin, Robert France, David Hart, Geoffrey Glaze, Burton Richards, Tom Beard, Philip Mitchell, Eric Landry, Prashant Allahabadi, Armando Carrasco, Adam Kawula, Daniel Stark, Stephen Wong, Tsen-Loong Peng, Edward Perez, Maneesh Katyal, Russell Glasser, Brad Gentry, Todd Williams, Daniel Thornton, Ricky Kwong, Aldo Sunaryo, Brian Crandall, Greg Heartsfield, Charles Mack, Phuc Nguyen, Mina Huang, James Edwards, Eric Qian, Salvatore Scaffidi, Puneet Bansal, , Dylan Aderson, Marcus Tyler,

M.S. IN PROGRESS: Michael Motro, Tyler Folkman, Rahi Kalantari,

International PhD Committees
Nayar Wanas, Univ. of Waterloo, 2002
Archana Sangole, Univ. of Western Ontario, 2004

Pabitra Mitra, ISI, Kolkata, 2004
Rasmus Pederson, Univ. Copenhagen, 2005
Qi He, Nanyang Tech Univ, Singapore, 2008.
Wonkook Kim, Purdue Univ., 2011
Wei Di, Purdue Univ, 2011
Nguyen Duc Thang, Nanyang Tech Univ, Singapore, 2011.

EVIDENCE OF TEACHING EFFECTIVENESS:
Courses Taught at UT:
GRADUATE:
Big Data Analytics for Healthcare, Fall 2015.
Data Mining (**new course**, introduced F98, Sp00, F00, F01, F02, F04, Sp06, Sp07, Sp08, Sp09, Sp10, Sp11Sp12, F14, Sp17)
Big Data analytics for Healthcare, (**new course**, introduced Sp 16)
Predictive Modeling (**new course**, introduced Sp 14)
A Practicum in Data Mining (**new course**, introduced F99, Sp2001)
Web Mining (**new course**, sp02, sp03)
Advanced Topics in Data Mining: (**new course,** Sp05, F11**)**
Advanced Topics: Ensembles and Hybrids (**new course**, introduced sp 97)
Neural Networks for Pattern Recognition **(new course**, introduced sp 96, sp98)
Advanced Topics: Learning and Generalization (**new course,** introduced fall 95)
Artificial Neural Systems (**new course** introduced sp 90, sp91, sp92, sp93, sp94, sp95, sp99)
Parallel Computer Architecture (sp94, sp92)
Parallel Architectures for AI (**new course** f89, sp93)
Computers for Symbolic Processing**. (new course**, sp90)

UNDERGRADUATE
Introduction to Data Mining (**new course**, introduced F08, Sp16, F16)
Algorithms (F07,F09, F10, F11, F12, Sp 13, Sp15)
Probability and Random Processes (F05, F06)
Introduction to Neural Networks (**new course**, introduced F99, Sp02, F02, Sp04, F04,Sp05)
Computer Architecture (su02, su99, f98, f97, f96, f95, f94 - 2 sections, f93, f92, f91, sp91)
Digital Systems Engineering II (f88, sp89)

EXECUTIVE EDUCATION
Full 3-credit (40 hrs) Courses
Option III: Software Engineering: Data Mining (Every Spring from 2000-2013)
Option III: Master in Business Analytics (McCombs): Advanced Predictive Modeling: Sp14, F14, F15, F16