

B. Aditya Prakash

Assistant Professor
Computer Science Department
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RESEARCH INTERESTS

I am broadly interested in **Data Mining, Applied Machine Learning** and **Databases** with emphasis on solving **big-data** problems in networks and time-series. Some of the research questions I answer deal with understanding and managing efficiently, dynamical mechanisms (like propagation) on networks, occurring across natural, social and technological systems. My research combines theoretical analysis of models, developing efficient algorithms and empirical studies on tera-byte scale data. I have also interests in time-series modeling and mining, and anomaly detection.

EMPLOYMENT

Virginia Tech., Blacksburg VA, USA

Assistant Professor, Computer Science Department
Member, Discovery Analytics Center (DAC)

December 2012 - present

EDUCATION

Carnegie Mellon University, Pittsburgh PA, USA

PhD. in Computer Science
– Committee:
Prof. Christos Faloutsos (Advisor, Chair), Prof. Roni Rosenfeld (CMU), Prof. David Andersen (CMU), Prof. Jon Kleinberg (Cornell University)

August 2007 - September 2012

MS in Computer Sc., Aug 2011

Indian Institute of Technology - Bombay, INDIA

B.Tech, Computer Science and Engineering
– Thesis Advisor: Prof. S. Sudarshan

July 2003 - May 2007

SELECTED ACHIEVEMENTS

- ◇ Received the **Facebook Faculty Gift Award**. (2015)
- ◇ Received the **SIAM Early Career Travel Award**, SDM—SIAM Data Mining Conf. (2013 and 2015)
- ◇ Selected for **best papers of ICDM 2012**, IEEE Intl. Conf. on Data Mining. (2012)
- ◇ Received the **CIKM Best Paper Award (all three tracks) 2012**, ACM Conf. on Information and Knowledge Management. (2012)
- ◇ Received the **ACM SIGKDD Travel Award**. (2012)
- ◇ Selected for **best papers of ICDM 2011**, IEEE Intl. Conf. on Data Mining. (2011)
- ◇ Awarded the CMU SCS **Graduate Fellowship**. Received perfect GRE and TOEFL scores. (2007)
- ◇ Secured **All India Rank (AIR) 58** out of 172, 000 candidates in the IIT - Joint Entrance Examination (IIT JEE) (2003)
- ◇ Was placed in the **top 0.1%** of students in NSEP & NSEC and hence selected for Indian National **Physics and Chemistry Olympiads (InPhO & InChO)** (2003)
- ◇ Was awarded the **Jawaharlal Nehru Science and Engg. Scholarship** by Govt. of India. (2003)
- ◇ Was awarded the prestigious **Kishore Vaigyanik Protsahan Yojana (KVPPY) Fellowship (Young Scientist Encouragement Fellowship)** by the Department of Science & Technology, Govt. of

India and administered by Indian Institute of Science, Bangalore. (2001)
webpage - <http://www.iisc.ernet.in/kvpy/>

- ◇ Was awarded the prestigious **National Talent Search Examination (NTSE) Scholarship** by NCERT (New Delhi). (2001)

PUBLICATIONS

Theses

1. B. Aditya Prakash. Understanding and Managing Propagation on Large Networks: Theory, Algorithms and Models. *PhD. Thesis, CMU, 2012.*
2. B. Aditya Prakash. On Query Optimization Issues in Fine-Grained Access Control. *Senior Thesis, IIT-Bombay, 2007.*

Invited Articles

1. B. Aditya Prakash. Propagation and Immunization in Large Networks. *Crossroads: The ACM Magazine for Students - Big Data Issue.*

Book Chapters

1. B. Aditya Prakash. Graph Mining for Cyber Security. In S. Jajodia et al. (eds.), *Cyber Warfare, Advances in Information Security 56*. Springer. 2015.

Refereed Journals

1. Yao Zhang and B. Aditya Prakash. Data-Aware Vaccine Allocation over Large-Networks. *ACM Transactions on Knowledge Discovery and Data Mining (TKDD)*. (accepted with minor revisions). 2015.
2. Chen Chen, Hanghang Tong, B. Aditya Prakash, Tina Eliassi-Rad, Michalis Faloutsos and Christos Faloutsos. Eigen-Optimization on Large Graphs by Edge Manipulation. *ACM Transactions on Knowledge Discovery and Data Mining (TKDD)*. (accepted with minor revisions). 2015.
3. Evangelos E. Papalexakis, Tudor Dumitras, Duen Horng Chau, B. Aditya Prakash and Christos Faloutsos. SharkFin: Spatio-temporal mining of software adoption and penetration. *Social Network Analysis and Mining Journal*. 2015.
4. B. Aditya Prakash, Jilles Vreeken, and Christos Faloutsos. Efficiently Spotting the Starting Points of an Epidemic in a Large Graph. *Knowledge and Information Systems Journal (KAIS) vol 38, no. 1, 35-59*. 2013.
5. Xuetao Wei, Nicholas Valler, B. Aditya Prakash, Iulian Neamtiu, Michalis Faloutsos and Christos Faloutsos. Competing Meme Propagation on Networks: A Network Science Perspective. *IEEE Journal on Selected Areas in Communication (JSAC), vol. 31, no. 6, 1049-1060*. 2013.
6. Xuetao Wei, Nicholas Valler, B. Aditya Prakash, Iulian Neamtiu, Michalis Faloutsos and Christos Faloutsos. Competing Meme Propagation on Networks: A Case Study of Composite Networks. *ACM SIGCOMM Computer Communication Review*, October 2012.
7. B. Aditya Prakash, Deepayan Chakrabarti, Michalis Faloutsos, Nicholas Valler, Christos Faloutsos. Threshold Conditions for Arbitrary Cascade Models on Arbitrary Networks. *Knowledge and Information Systems Journal (KAIS)*. 2012, doi:10.1007/s10115-012-0520-y.
8. Shipra Agarwal, Jayant R. Haritsa and B. Aditya Prakash. FRAPP: A Framework for high-Accuracy Privacy-Preserving Mining. *Intl. Journal on Data Mining and Knowledge Discovery*

(DKMD), Springer, vol. 18, no. 1., February 2009, Ed: Johannes Gehrke.

Refereed Conferences

1. Shashidhar Sundereisan, Jilles Vreeken and B. Aditya Prakash. Hidden Hazards: Finding Missing Nodes in Large Graph Epidemics. *SDM 2015, Vancouver*
2. Sudip Saha, Abhijin Adiga, B. Aditya Prakash and Anil Vullikanti. Approximation Algorithms for Reducing the Spectral Radius to control Epidemic Spread. *SDM 2015, Vancouver*
3. Liangzhe Chen, K. S. M. Tozammel Hossain, Patrick Butler, Naren Ramakrishnan and B. Aditya Prakash. Flu Gone Viral: Syndromic Surveillance of Flu on Twitter using Temporal Topic Models. *IEEE ICDM 2014, Shenzhen*
4. Yao Zhang and B. Aditya Prakash. Scalable Vaccine Distribution in Large Graphs given Uncertain Data. *ACM CIKM 2014, Shanghai*
5. Manish Purohit, B. Aditya Prakash, Chanhyun Kang, Yao Zhang and V. S. Subrahmanian. Fast Influence-based Coarsening for Large Networks. *SIGKDD 2014, New York City*
6. Fang Jin, Rupinder Khandpur, Nathan Self, Edward Dougherty, Feng Chen, B. Aditya Prakash and Naren Ramakrishnan. Modeling Mass Protest Adoption in Social Network Communities using Geometric Brownian Motion. *SIGKDD 2014, New York City*
7. Shashidhar Sundereisan, Abhay Rao Bhadriraju, M. Saquib Khan, Naren Ramakrishnan and B. Aditya Prakash. SansText: Classifying Temporal Topic Dynamics of Twitter Cascades Without Tweet Text. *ACM/IEEE ASONAM 2014, Beijing.*
8. Yao Zhang and B. Aditya Prakash. DAVA: Distributing Vaccines over Networks under Prior Information. *SDM 2014, Philadelphia*
9. Evangelos E. Papalexakis, Tudor Dumitras, Duen Horng Chau, B. Aditya Prakash and Christos Faloutsos. Spatio-temporal Mining of Software Adoption & Penetration. *ACM/IEEE ASONAM 2013, Niagara Falls. (Invited to SNAM Journal Best Papers of ASONAM).*
10. B. Aditya Prakash, Lada Adamic, Theodore Iwashnya, Hanghang Tong and Christos Faloutsos. Fractional Immunization on Networks. *SDM 2013, Austin*
11. Danai Koutra, Vaseilios Koutras, B. Aditya Prakash and Christos Faloutsos. Patterns amongst Competing Task Frequencies: Super-Linearity, and the Almond-DG model. *PAKDD 2013, Gold Coast*
12. B. Aditya Prakash, Jilles Vreeken and Christos Faloutsos. Spotting Culprits in Epidemics: Who and How many?. *IEEE ICDM 2012, Brussels (Invited to KAIS Journal Best Papers of ICDM).*
13. Hanghang Tong, B. Aditya Prakash, Tina Eliassi-Rad, Michalis Faloutsos and Christos Faloutsos. Gelling, and Melting, Large Graphs through Edge Manipulation. *ACM CIKM 2012, Hawaii. (Received the CIKM Best Paper Award (all three tracks)).*
14. Yasuko Matsubara, Yasushi Sakurai, B. Aditya Prakash, Lei Li and Christos Faloutsos. Rise and Fall Patterns of Information Diffusion: Model and Implications. *SIGKDD 2012, Beijing*
15. Alex Beutel, B. Aditya Prakash, Roni Rosenfeld and Christos Faloutsos. Interacting Viruses on a Network: Can both survive? *SIGKDD 2012, Beijing*
16. B. Aditya Prakash, Alex Beutel, Roni Rosenfeld and Christos Faloutsos. Winner-takes-all: Competing Viruses or Ideas on fair-play networks. *WWW 2012, Lyon.*
17. B. Aditya Prakash, Deepayan Chakrabarti, Michalis Faloutsos, Nicholas Valler and Christos Faloutsos. Threshold Conditions for Arbitrary Cascade Models on Arbitrary Networks. *IEEE ICDM 2011, Vancouver. (Invited to KAIS Journal Best Papers of ICDM).*

18. Lei Li and B. Aditya Prakash. Times Series Clustering: Complex is Simpler!. *ICML 2011, Bellevue*.
19. Nicholas Valler, B. Aditya Prakash, Hanghang Tong, Michalis Faloutsos and Christos Faloutsos. Epidemic Spreading on Mobile Ad Hoc Networks: Determining the Tipping Point. *IEEE NETWORKING 2011, Valencia*.
20. Hanghang Tong, B. Aditya Prakash, Tina Eliassi-Rad and Christos Faloutsos. On the Vulnerability of Large Graphs. *IEEE ICDM 2010, Sydney*.
21. B. Aditya Prakash, Hanghang Tong, Nicholas Valler, Michalis Faloutsos and Christos Faloutsos. Virus Propagation on Time-Varying Networks: Theory and Immunization Algorithms. *ECML-PKDD 2010, Barcelona*.
22. Lei Li, B. Aditya Prakash and Christos Faloutsos. Parsimonious Linear Fingerprinting for Time Series. *VLDB 2010, Singapore*.
23. Keith Henderson, Tina Eliassi-Rad, Christos Faloutsos, Leman Akoglu, Lei Li, Koji Maruhashi, B. Aditya Prakash and Hanghang Tong. MetricForensics: A Multi-Level Approach for Mining Volatile Graphs. *SIGKDD 2010, Washington D.C.*
24. B. Aditya Prakash, Ashwin Sridharan, Mukund Seshadri, Sridhar Machiraju and Christos Faloutsos. EigenSpokes: Surprising Patterns and Scalable Community Chipping in Large Graphs. *PAKDD 2010, Hyderabad*.
25. B. Aditya Prakash, Nicholas Valler, David Andersen, Michalis Faloutsos and Christos Faloutsos. BGP-lens: Patterns and Anomalies in Internet-Routing Updates. *SIGKDD 2009, Paris*
26. C. Gokhale, N. Gupta, P. Kumar, L. V. S. Lakshmanan, R. Ng and B. Aditya Prakash. Complex Group-By Queries For XML. *IEEE ICDE 2007, Istanbul*.

Refereed Workshops

1. Xuetao Wei, Nicholas Valler, Michalis Faloutsos, Iulian Neamtiu, B. Aditya Prakash and Christos Faloutsos. Smartphone Viruses Propagation on Heterogeneous Composite Networks. *IEEE Network Science Workshop 2013, West Point*.
2. B. Aditya Prakash, Michalis Faloutsos and Christos Faloutsos. Formalizing the BGP stability problem: patterns and a chaotic model. CMU-Technical Report. Preliminary Version in *IEEE INFOCOM NetSciCom Workshop, 2011*.
3. B. Aditya Prakash, Ashwin Sridharan, Mukund Seshadri, Sridhar Machiraju and Christos Faloutsos. Surprising Patterns and Scalable Community Detection in Large Graphs. *IEEE ICDM Large Scale Data Mining Workshop 2009, Miami*.

PATENTS

1. B. Aditya Prakash, Alice Zheng, Jack Stokes, Eric Fitzgerald, Theodore Hardy. Analysis of Computer Network Activity by Successively Removing Accepted Types of Access Events (pending, filed April 2010)
2. Ashwin Sridharan, Mukund Seshadri, James Schneider, B. Aditya Prakash, Christos Faloutsos and Sridhar Machiraju. Determining User Communities in Communication Networks. (pending, filed March 2010)

RESEARCH
EXPERIENCE

- ◇ **Carnegie Mellon University, Pittsburgh** *Graduate Student* **2007-2012**
Advisor: Prof. Christos Faloutsos (CSD, CMU)
Joint with: Prof. Roni Rosenfeld (CMU), Prof. Lada Adamic (UMich), Prof. Michalis Faloutsos (UCR), Prof. David Andersen (CMU), Prof. Theodore Iwashyna (M.D.) (UMich)
Research on data mining, virus propagation, immunization, marketing, time-series mining and modeling, modeling BGP routing and finding anomalies.

- ◇ **Yahoo! Research, Santa Clara** *Summer Intern* **June-August 2011**
Mentors: Dr. Ravi Kumar, Dr. Deepayan Chakrabarti and Dr. Kunal Punera
Studied on the Hadoop+PIG system, more than 10 Tera-bytes of data over multiple months, and showed fundamental differences in the dynamics of hashtags (topics) on Twitter.

- ◇ **Microsoft Research, Redmond** *Summer Intern* **June-August 2009**
Mentors: Dr. Jack Stokes and Dr. Alice Zheng
Developed and implemented a graph-based active learning algorithm to detect anomalies among millions of network connections.

- ◇ **Sprint Research Labs, Burlingame** *Summer Intern* **May-July 2008**
Mentors: Dr. Sridhar Machiraju, Dr. Mukund Seshadri, Dr. Ashwin Sridharan
Analyzed mobile call-graphs covering billions of calls and discovered the unusual 'Eigenspokes' pattern to extract communities like spammers and telemarketers.

- ◇ **Computer Sc. & Engg., IIT-Bombay** *Undergraduate Research* **August 2006-May 2007**
Advisor: Prof. S. Sudarshan
We formally developed and implemented a substantially better method of combining redundancy removal and safe-plan generation in presence of unsafe user-defined functions.

- ◇ **University of British Columbia, Vancouver** *Summer Intern* **May-July 2006**
Mentors: Prof. Laks. V. S. Lakshmanan, Prof. Raymond Ng
Designed algorithms for complex group-by/aggregate queries over very large XML databases in memory.

- ◇ **SERC, Indian Institute of Science, Bangalore** *Summer Intern* **May-July 2005**
Mentor: Prof. Jayant R. Haritsa
Enhanced a matrix theoretic framework by relating dataset size and mining accuracy/privacy, optimizing & extending it to classification rule mining.

GRANTS

1. Facebook Faculty Gift Award 2015. Amount: \$25,000 (unrestricted funds).
2. NEH/DFG Bilateral Digital Humanities Program. *Tracking the Russian Flu in U.S. and German Medical and Popular Reports, 1889-1893*. PI: Ewing (History, VT). co-PI: Prakash. Amount: \$175,000 (personal share: 40%). Duration: 07/01/2015-12/15/2017.
3. NSA (subcontract to UMD). *Human-behavioral Modeling of Cyber-vulnerability*. PI: Prakash (VT part). Amount: \$315,000 (VT part). Duration: Feb 01 2014-Jan 31 2017.

4. NSF IIS EAGER (ID: IIS-1353346). *Immunization in Influence and Virus Propagation on Large Networks*. PI: Prakash. Amount: \$88,821. Duration: Sept 15 2013-Aug 31 2014.
5. VT Provost's Office Junior Faculty Grant. Amount: \$1,500. Duration: Mar 2014-Mar-2016.
6. Amazon Web Services (AWS) Teaching Grant. Amount: \$10,000 credits for my classes CS6604, CS5614 and CS4604.

TEACHING

Instructor

- ◇ **CS 5614 (Big) Data Management Systems** (Graduate, Enrollment: 30, Computer Science Department, VT). (Fall 2014)
- ◇ **CS 6604 Data Mining Large Networks and Time-Series** (Graduate, Enrollment: 30, Computer Science Department, VT). (Fall 2013)
- ◇ **CS 4604 Introduction to Database Management Systems** (Undergraduate, Enrollment: 35-45, Computer Science Department, VT). (Spring 2013, Spring 2014, Spring 2015)

Guest Lectures

- ◇ **CEE-504 Info. Tech. in Construction** (Civil and Environmental Engineering Department, VT). Lecture: Big Data: Dynamical Processes on Networks. Instructor: Prof. Sunil Sinha. (2012)
- ◇ **CS-6604 Social Media Analytics** (Computer Science Department, VT). Lecture: Information Diffusion. Instructor: Prof. Naren Ramakrishnan. (2012)
- ◇ **15-826 Multimedia Databases and Data Mining** (Machine Learning Department, CMU). Lecture: Virus/Influence Propagation. Instructor: Prof. Christos Faloutsos. (2011)
- ◇ **47-867 Social Network Analysis** (Tepper School of Business, CMU). Lecture: Epidemic Thresholds. Instructor: Prof. R. Ravi. (2010)

Teaching Assistant

- ◇ **15-451 CMU Undergraduate Algorithms** by Prof. Avrim Blum and Prof. Manuel Blum: Was the senior TA, held weekly recitations, graded assignments, held office hours etc.
- ◇ **15-415 CMU Database Applications** by Prof. Christos Faloutsos: Designed and graded assignments, held office hours etc.

STUDENT ADVISING ◇ **Ph.D. Students**

1. Yao Zhang. (Expected 2017)
2. Liangzhe Chen. (Expected 2018)
3. Sorour Ekhtiari Amiri. (Expected 2019)
4. Elaheh Raisi. (Expected 2020)

◇ **M.S. Students**

1. Benjamin Wang. (Graduated 2014. First Employment: Telos Communications.)
2. Shashidhar Sundereisan. (Graduated 2014. First Employment: Bloomberg Inc.)

◇ **Committee Membership**

1. Md. Hafeez, Ph.D., Advisor: Prof. Ali Butt. Thesis Proposal: Spring 2013. Graduated: Summer 2014.
2. Md. Ahsanur Rahman, Ph.D., Advisor: Prof. T. M. Murali. Thesis Proposal: Fall 2013.
3. Bingsheng Wang, Ph.D., Advisor: Prof. Chang-Tien Lu.
4. K. S. M. Tozammel Hussain, Ph.D., Advisor: Prof. Naren Ramakrishnan.

5. Huijuan Shao, Ph.D., Advisor: Prof. Naren Ramakrishnan.
6. Sally Hamouda, Ph.D., Advisor: Prof. Cliff Shaffer.
7. Qing Sun, Ph.D., Advisor: Prof. Dhruv Batra (ECE).
8. Aravindan Mahendiran, M.S, Advisor: Prof. Naren Ramakrishnan. Graduated: Spring 2014.
9. Rushi Kaw, M.S., Advisor: Prof. Madhav Marathe. Graduated: Summer 2014.
10. Md. Saquib Khan, M.S., Advisor: Prof. Anul Vullikanti. Graduated: Fall 2014.
11. Michael Cogswell, M.S., Advisor: Prof. Dhruv Batra (ECE).

COMMUNITY
ACTIVITIES

◇ **Member** - ACM, IEEE, ASEE, SIAM

◇ **Tutorials and Summer Schools**

1. *Propagation on Large Networks: Theory and Tools*. ECML-PKDD 2012, Bristol. September 2012.
2. *Understanding and Managing Cascades on Large Graphs*. VLDB 2012, Istanbul. August 2012.
3. *Virus Propagation on Large Networks: Theory and Tools*. MIDAS Summer Undergraduate Research School, UPitt. June 2012.

◇ **Invited Talks**

1. *Making Diffusion Work for you*. MIT Lincoln Labs Graph Exploitation Symposium. August 2014.
2. *Data Mining Networks and Time-Series for Fun and Profit*. VT ECE Summer Research Experience for Undergraduates. June 2014.
3. *Understanding and Managing Cascades on Large Graphs*. NEC Labs. April 2014.
4. *Dynamical Processes for Cyber-Vulnerability*. ARO Workshop on Cyber Warfare: Building the Scientific Foundation. George Mason University, Fairfax. March 2014.
5. *Understanding and Managing Cascades on Large Graphs*. SIAM 2013 Conference at Oak Ridge National Lab, Oak Ridge. March 2013.
6. *Understanding and Managing Cascades on Large Graphs*. Virginia Tech., CS Friday Series. November 2012.
7. *Influence Propagation on Large Graphs*. Massive Graphs: Big Compute meets Big Data, SIAM Annual Meeting, Minneapolis. July 2012.
8. *Propagation on Large Networks*. Network Science - CTA INARC Seminar. May 2012.
9. *Dynamical Processes on Large Networks*. Army Research Lab, Adelphi, Seminar. April 2012.
10. *Dynamical Processes on Large Networks*. University of Maryland, College Park, CS Seminar. April 2012.
11. *Propagation on Large Networks*. University of Pittsburgh, Department of Public Health, MIDAS Seminar. April 2012.
12. *Dynamical Processes on Large Networks*. Google Research, New York City, Research Talk. April 2012.
13. *Dynamical Processes on Large Networks*. Virginia Tech., CS Seminar. March 2012.
14. *Dynamical Processes on Large Networks*. AT&T Research, Florham Park, Seminar. March 2012.
15. *Epidemic Thresholds, Immunization and BGP*. University of Michigan, Ann Arbor, Information Seminar. April 2010.
16. *Virus Propagation in Time-Varying Networks: Theory and Immunization Algorithms*. BBN, Cambridge. INARC/NS-CTA Meeting. September 2010.

17. *Virus Propagation in Time-Varying Networks: Theory and Immunization Algorithms*. CMU-Yahoo! Machine Learning Seminar. October 2010.
18. *BGP-lens: Patterns and Anomalies in Internet-Routing Updates*. ECE Parallel Data Laboratory Retreat. October 2009.

◇ **Conference Organization**

1. **Publicity Chair**, SDM 2016.
2. **Demo Chair**, IEEE ICDM 2015, Atlantic City, NJ.

◇ **Area Chair (or Senior Program Committee)**

1. WSDM 2016, San Francisco
2. CIKM 2015, Melbourne

◇ **Program Committee member**

Conferences

1. SIGKDD 2015
2. SDM 2015
3. ICDM 2015
4. ASONAM 2015
5. WSDM 2015
6. IEEE R10 HTC 2014
7. ICDM 2014
8. IEEE BigData Conf. 2014
9. ECML/PKDD 2014
10. WWW 2014
11. SIGKDD 2014
12. ICWSM 2014
13. SDM 2014
14. SIGMOD 2014 (Demo)
15. ACM SAC 2014
16. ECML/PKDD 2013
17. IEEE BigData Conf. 2013
18. AAAI 2013
19. IJCAI 2013
20. SDM 2013

Workshops

1. ICDM 2011 Data Mining Technologies for Computational Creative Intelligence
2. WWW 2014 Big Graph Mining Workshop
3. SDM 2014 Optimization Methods for Anomaly Detection
4. SDM 2014 Mining Large Networks
5. SIGKDD 2014 Interactive Data Exploration and Analysis
6. SocInfo 2014 Workshop on Social Influence

7. SDM 2015 Mining Large Networks

◇ **NSF Review Panelist** CISE 2013 (once), 2014 (twice).

◇ **Reviewer**

1. The VLDB Journal
2. IEEE ACM Transactions on Networking (ToN)
3. IEEE Transactions on Information Theory (ToI)
4. Journal of Machine Learning Research (JMLR)
5. IEEE Journal on Selected Areas in Communication (IEEE JSAC)
6. Network Science Journal
7. Journal of Computer and System Sciences (JCSS)
8. Networking Science
9. ACM Trans. on Knowledge Discovery from Data (ACM TKDD)
10. IEEE Trans. on Knowledge and Data Engg. (IEEE TKDE)
11. SIAM Journal on Applied Dynamical Systems
12. Data Mining and Knowledge Discovery Journal (DAMI)
13. Advances in Complex Systems Journal
14. Social Network Analysis Journal
15. Europhysics Letters (EPL)
16. Information Processing Letters (IPL)

◇ **Virginia Tech. Committees**

1. College of Science: Computational Modeling and Data Analytics Colloquium Committee (2014)
2. CS: Faculty Search Committee (2014, 2015 (two searches))
3. CS: Ph.D. Qualifiers Committee (2013, 2014, 2015)

◇ **External Reviewer** (several times): EDBT, VLDB, WWW, KDD, ICDM, SIGMOD, ICWSM

◇ **Organizer DB-Seminar** CMU (2010-2012): Organized the Database Seminar at CMU.

◇ **Dataset Manager** CMU (2008-2011): Managed the data repository of the DB-group.

◇ **Student Contact** CMU (2008-2011): Contact for new students admitted to the Department.

◇ **Student Mentor** IGSA@CMU (2010-2011): Mentored newly admitted Indian students of various departments in CMU. Helped them with academic and cultural issues.

◇ **Student Mentor** CSE, IIT Bombay (2006): Mentored sophomores of the CSE Dept. by guiding them on academic issues and helping them convey their difficulties to the faculty.

◇ **System Administrator** Hostel Six, IIT Bombay (2004-2005): Maintained a network consisting of all the machines (Linux, Windows and Mac based) in the dorm. Work involved setting up NFS/NIS Servers, Proxy, FTP, DNS and handling user accounts.

◇ **Head Boy** Delhi Public School, Bhilai.

EXTRACURRICULAR
ACTIVITIES

◇ Am a **certified Tabla Visharad (Classical Tabla Scholar)** from the famous Indira Kala Sangeet Vishwavidyalaya, Khairagarh, C.G., India after successful completion of the 6-year theory+practical course (1995-2000). Secured **Distinction** in practical in 4th year. Performed solo in functions in school, college and outside. (Tabla is an Indian musical instrument)

◇ Was a regular member of school and house Cricket, Dramatics, Debating and Quizzing teams.