

ADITYA AKELLA

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Carnegie Mellon University
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EDUCATION

July 2000	Bachelor of Technology Computer Science and Engineering	IIT Madras Chennai, India
Aug 2000 - Present	Doctoral Candidate Computer Science Department	Carnegie Mellon University Pittsburgh, PA

HONORS

- Awarded the *IBM PhD Fellowship* (2003-2004)
- Graduated third from Indian Institute of Technology, Madras (2000)
- Awarded the *Institute Merit Prize* by Indian Institute of Technology, Madras (1996-97)
- Secured 19th rank in All India Joint Entrance Examination (JEE 1996) for the Indian Institutes of Technology
- Gold medalist at the Regional Mathematics Olympiads (1994 & 1995), India
- Recipient of the *National Talent Search Examination (NTSE)* Scholarship, India (1993-94)

RESEARCH INTERESTS

Networking, Performance Analysis of Distributed Systems,
Network Security and Game Theory

RESEARCH PROJECTS

- **Graduate Research, Carnegie Mellon University (On-going)**
A Study of Wide-Area Congestion and How to Avoid It
With Prof. Srinivasan Seshan (CMU), Dr. Anees Shaikh (IBM Research), Prof. Bruce Maggs (CMU/Akamai Technologies) and Shuchi Chawla (CMU).
<http://www.cs.cmu.edu/~aditya/bottlenecks.html>

- **Summer Internship, AT&T Center for Internet Research at ICSI, Berkeley (now ICIR) (2001)**
Exploring Congestion Control
With Dr. Scott Shenker (ICIR), Prof. Richard Karp (ICIR/UC Berkeley), Prof. Christos Papadimitriou (UC Berkeley), Prof. Ion Stoica (UC Berkeley)
<http://www.cs.cmu.edu/~aditya/explore-cc.html>
- **Graduate Research, Carnegie Mellon University (2000-01)**
The Impact of False Sharing on Shared Congestion Management
With Prof. Srinivasan Seshan (CMU), Prof. Hari Balakrishnan (MIT)
<http://www.cs.cmu.edu/~aditya/false-sharing.html>
- **Summer Internship, IBM India Research Labs (IBM IRL), New Delhi, India (1999)**
Approximation Algorithms for Capacity Auctions
With Dr. Alok Aggarwal (IBM, IRL)
- **Undergraduate Thesis Research (1999-2000)**
Competitive Algorithms for the Online Bin-Stretching Problem
With Prof. C. Pandu Rangan (IIT Madras)

TEACHING EXPERIENCE

- Teaching Assistant for *Computer Networking (Undergraduate Level)*, Spring 2002
Computer Science Department, Carnegie Mellon University
Instructors: Prof. Peter Steenkiste and Prof. Mor Harchol-Balter
- Teaching Assistant for *Introduction to Computing*, Spring 2000
Computer Science and Engineering Department, IIT Madras, India
Instructors: Prof. Hema A. Murthy and Prof. C. Pandu Rangan

SELECTED PUBLICATIONS

- Aditya Akella, Srinivasan Seshan and Anees Shaikh. “An Empirical Evaluation of Wide-Area Internet Bottlenecks”, *To appear in Proc. Internet Measurement Conference (IMC) 2003*, Miami, FL, Oct 2003. Also appeared in *Proc. ACM SIGMETRICS 2003*, San Diego, CA, June 2003 (short paper).
- Aditya Akella, Hari Balakrishnan and Srinivasan Seshan. “The Impact of False Sharing on Shared Congestion Management”, *To appear in Proc. International Conference on Network Protocols (ICNP) 2003*, Atlanta, GA, November 2003. Also appeared in *ACM SIGCOMM Computer Communication Review*, January 2002 (short paper).
- Aditya Akella, Bruce Maggs, Srinivasan Seshan, Anees Shaikh and Ramesh Sitarama. “A Measurement-Based Analysis of Multihoming”, *Proc. ACM SIGCOMM 2003*, Karlsruhe, Germany, August 2003.
- Aditya Akella, Shuchi Chawla, Arvind Kannan and Srinivasan Seshan. “Scaling properties of the Internet Graph.”, *Proc. ACM Principles of Distributed Computing (PODC) 2003*, Boston, MA, July 2003.
- Aditya Akella, Richard Karp, Srinivasan Seshan, Scott Shenker and Christos Papadimitriou. “Selfish Behavior and Stability of the Internet: A Game-Theoretic Analysis of TCP”, *Proc. ACM SIGCOMM 2002*, Pittsburgh, PA, August 2002.

REFERENCES

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