

Ankur Mani

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EDUCATION

Massachusetts Institute of Technology

PhD candidate 2007-present

Arizona State University

MS, Department of Electrical Engineering, 2007

Indian Institute of Technology, New Delhi

B.Tech. Department of Electrical Engineering, 2001

RESEARCH EXPERIENCE

MIT Media Lab

Research Assistant, September 2007 to present

Experience: Research on strategic interactions in social networks.

Arts, Media and Engineering, Arizona State University

Research Assistant, January 2004 to Spring 2006

Experience: Work on human, environment and media context modeling in Interactive multimedia systems.

Intel Research, Seattle

Intern, April 2007 to August 2007.

Experience: Statistical modeling and prediction of human tasks in smart homes, using observations from RFID sensors.

AVAYA Labs, New Jersey

Intern, May 2005 to August 2005.

Experience: Statistical modeling of Enterprise social context and use of social context for efficient scheduling of multi-media conferences in and enterprise.

Motorola India Electronics Ltd., Hyderabad, India

Senior Software Engineer, April 2003 to January 2004

Software Engineer, September, 2001 to March, 2003.

Experience: Work on broadband and multimedia systems, media creation (segmentation, analysis and indexing), distribution (carriage in DVB and ATSC multiplex with support for Qos for different media streams) and media interaction (media retrieval and browsing).

CWI, Amsterdam, The Netherlands

Intern, May, 2001 to July, 2001.

Experience: Work on non-linear scale spaces and its applications in Computer Vision and Content-based Image retrieval systems.

Indian Institute of technology, New Delhi

Summer undergraduate researcher, May, 1999 to July, 1999

Experience: Research and study on Wavelets and its application in determining Fractal Dimensions of image regions and applications in image segmentation.

IMPORTANT GRADUATE COURSES

Mathematics: Real and Functional Analysis, Topology, Theory of Probability

Electrical Engineering and Computer Science: Dynamic Programming and Stochastic Control, Game Theory, Convex Analysis and Optimization, Machine Learning, Information theory, Linear Systems Theory, Detection and Estimation theory.

Economics: Microeconomic Theory (Consumer and Producer Theory, Public Goods and Externalities, and General Equilibrium), Advanced Topics in Game Theory (Adverse Selection, Market Design and Mechanism Design, Matching Theory and Cheap Talk).

Social Sciences and Multimedia: Social Networks and social capital in organizations, Digital Innovations, Building Mobile Applications, Image Understanding, Multimedia Systems, Speech Analysis and Coding.

SELECTED PUBLICATIONS

Working Papers

1. Mani Ankur, Ozdaglar Asuman, Pentland Alex, "Bilateral Exchanges in Social Networks."
2. Mani Ankur, Pentland Alex, "Exchanging Favors in Social Networks."

Journal Papers

1. Mani Ankur, Sundaram Hari, "Modeling User Context with Applications to Media Retrieval," Multimedia Systems Journal, Springer Verlag, 2007 (16 citations).
2. Dong Wen, Mani Ankur, Pentland Alex, Lepri Bruno, Pianesi Fabio, "Modeling Group Discussion Dynamics," submitted to IEEE Transactions on Autonomous Mental Development.

Conferences and Workshops

1. Mani Ankur, Pentland Alex, "Optimal allocation of health resources among communities at risk," INFORMS Data Mining and Health Informatics Workshop, Washington DC, 2008.
2. Mani Ankur, Pentland Alex, "Stability of Exchange Networks," INFORMS, Washington DC, 2008.
3. Lepri Bruno, Mani Ankur, Pentland Alex, Pianesi Fabio, "Honest Signals in the Recognition of Functional Relational Roles in Meetings" AAAI Spring Symposium, Stanford, CA, 2009.
4. Mani Ankur, Sundaram Hari, 'Modeling User Context with Applications to Media Retrieval,' Multimedia Systems Journal, Springer Verlag, Special Issue on User-Centered Multimedia, Summer 2006.
5. Mani Ankur, Sundaram Hari, 'Context Aware Media Retrieval,' CIVR 2006.
6. Mani Ankur, John Ajita, Seligmann Doree, "Cohesive Team Selection for a Communication Task," INFORMS, Puerto Rico, 2007.
7. John Ajita, Mani Ankur, Seligmann Doree, Klemm Reinhard, "HERMES: A Platform for Context-Aware Enterprise Communication," CoMoRea, 2006.
8. Mani Ankur, Sundaram Hari, Birchfield David, Qian Gang, 'The networked home as a user-centric multimedia system,' Proceedings of the Workshop on Next Generation Broadband Challenges, at the ACM Multimedia 2004.
9. H. Sridharan, A. Mani and H. Sundaram (2005). A Multimodal Complexity Comprehension-Time Framework For Automated Presentation Synthesis, ICME 2005.
10. H. Sridharan, A. Mani, H. Sundaram, J. Brungart and D. Birchfield (2005). Context-Aware Dynamic Presentation Synthesis For Exploratory Multimodal Environments, ICME 2005.
11. Mani Ankur, 'Video Segmentation using Stabilized Inverse Diffusion,' ICME 2003.
12. Mani Ankur and Diwan Gaurav, 'Noise reduction in HFC Networks using Adaptive Noise Cancellation techniques', 'The All India College Technical Festival(TRYST 2001),' IIT Delhi, January, 2001, **recipient of the best paper award**.

AWARDS AND HONORS

- 'Best Technical Paper' awarded at 'The All India College Technical Festival (TRYST 2001),' organized at The Indian Institute of Technology, New Delhi, January, 2001.
- 'Award of Honor' for my performance in CBSE, Std. XII examinations, 1997 at Delhi Public School, New Delhi.
- Ranked among the top 0.2% out of more than 100,000 candidates in the joint entrance examinations for the IITs, India 1997.
- 'BRAVO' award for the seminal work in spatio-temporal video segmentation at Motorola, December, 2003.
- 'Certificate of excellence' for the performance and seminal work done in the creation of a content-based image retrieval system, CWI, July, 2001.

PROFESSIONAL ACTIVITIES

- Member of the Media, Arts and Sciences (MAS) Student Committee.
- Representative of the MAS in the MIT Graduate Student Council.
- Organizer of the Harvard-MIT Networks Reading Group.
- Mentored three undergraduates at MIT (MIT UROP program).
- Founder and Vice-president of the Arts, Media and Engineering Student Association at Arizona State University (2005-2006).
- Reviewer for several conferences and journals including, ACM SIGMM, CSCW, CHI, IEEE ICIP, ICME, ACM TOMCAP, ICMI, and ICDL.

REFERENCES

- Prof. Alex (Sandy) Pentland,
Toshiba Professor of Media, Arts and Sciences, MIT, Cambridge MA 02139
Email: pentland@media.mit.edu
- Prof. Asuman Ozdaglar,
Department of EECS and Operations Research Center, MIT, Cambridge MA 02139
Email: asuman@mit.edu
- Prof. Hari Sundaram,
Arts Media and Engineering and Department of Computer Science, ASU, Tempe AZ 85287
email: Hari.Sundaram@asu.edu
- Prof. Armando Rodriguez,
Department of Electrical Engineering, ASU, Tempe AZ 85287
email: aar@asu.edu.
- Prof. Harvey Thornburg,
Arts, Media and Engineering and Department of Electrical Engineering, ASU, Tempe AZ 85287
email: Harvey.Thornburg@asu.edu.