

Vidit Jain

Visa Status F1

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Education

2007-present	PhD Candidate	GPA: 3.98 / 4.00
2007	Master of Science, Computer Science University of Massachusetts Amherst	GPA: 4.00 / 4.00
2002	Bachelor of Technology, Computer Science and Engineering Indian Institute of Technology (IIT), Kanpur	

Research Interests

Machine Learning, Computer Vision, and Information Retrieval.

Experience

Aug'04-present	Research Assistant	Computer Science Department, UMass Amherst
June'09-Aug'09	Intern	Microsoft Research, Bangalore India
Jan'09-May'09	Teaching Assistant	Intro. to Problem Solving using Java, UMass Amherst
June'07-Aug'07	Intern	ISRC, Kodak Research Labs, Rochester NY
May'06-Aug'06	Intern	Live Labs, Microsoft Research, Redmond WA
Jun'02-Aug'04	Technical Lead	Read-Ink Technologies Pvt. India Ltd., Bangalore, India
May'02-Jun'02	Instructor	Data Structures and Algorithms, IIT Kanpur
May'01-Jul'01	Intern	Dept. of Computing Science, Umeå University, Sweden
May'00-Oct'00	Project Fellow	Dept. of Computer Science and Eng. IIT Kanpur

Selected Publications (see [webpage](#) for the full list)

- Vidit Jain, Amit Singhal, Jiebo Luo. [Selective Hidden Random Fields: Exploiting Domain Specific Saliency for Event Classification](#). CVPR 2008. [*Acceptance rate: 27.9%*].
- Vidit Jain, Erik Learned-Miller, Andrew McCallum. [People-LDA: Anchoring Topics to People Using Face Recognition](#). ICCV 2007. [*Acceptance rate: 23.6%*].
- Gary B. Huang, Vidit Jain, Erik Learned-Miller. [Unsupervised Joint Alignment of Complex Images](#). ICCV 2007. [*Acceptance rate: 23.6%*].
- Vidit Jain, Andras Ferencz, Erik Learned-Miller. [Discriminative Training of Hyper-feature Models for Object Identification](#). BMVC 2006. [*Acceptance rate: 28.8%*].

Honors/Awards

- Fellowship nominations: Google PhD fellowship (2009), Microsoft Research fellowship (2005), UMass Graduate School fellowship (2005-2006).
- All-India Rank 54 in IIT Joint Entrance Examination'1998, 16 in Roorkee-JEE'98.
- National Talent Search (NTS) Scholar, 1996-2002 (conducted by NCERT-India).

Professional Activities

- Reviewer for (**journal**): PAMI, IMAVIS, IJPRAI, JISE; (**conference**): CVPR, ICCV, ECCV, BMVC, NIPS, ICML, VISAPP, ICVS.
- Substitute coach of the UMass programming team at ACM ICPC regional competition, 2008.
- Publisher of [Indian Face Database](#).
- Organizer of [Machine Learning and Friends' Lunch](#), UMass Amherst, 2006-2007.
- Assistant Editor, [Scholarpedia](#), 2008.

Relevant projects

- Graduate Research at UMass Amherst
 - Building a self-adjusting, context-aware face detection and recognition system for unconstrained environments such as news, sports, and group photographs.
 - Developing machine learning techniques for computer vision problems: a directed graphical model for multiple sources of information (ICCV'07), hidden-state conditional random fields for jointly solving related tasks (CVPR'08), discriminative training of hyper-feature models for object identification (BMVC'06), and unsupervised joint alignment of face images (ICCV'07) and 3D MRI volumes (IPMI'06).
 - Studying the effect of training size, class imbalance, and distribution disparity on the generalizability of several approaches for information retrieval to evaluate the applicability of various results from statistical learning theory.
- Image Re-ranking for Web-Search (Microsoft Research India)
 - Explored the utility of click data for re-ranking the retrieved results for image search.
- Contextual Scene Categorization (Kodak Research Labs)
 - Proposed *selective hidden random fields* (CVPR'08) that simultaneously segment the object of interest in an image and use it for classification. We demonstrated the utility of this model for classifying the sporting event in personal photographs.
- Free-form Address Recognition (Live Labs, MSR Redmond)
 - Explored tree adjoining grammars for semi-structured web documents. We proposed an efficient approximate algorithm to parse these documents to recognize free-form addresses.
- Handwriting Recognition (Read-Ink Technologies)
 - Led a team of eight engineers working on building models for the lower case characters for an online cursive handwriting recognition system. My responsibilities involved design and implementation of this module and its integration with the overall system. I reported to the CTO of the company, Thomas O. Binford (Prof. Emeritus, Stanford University).
- Applications Processing and Management (IIT Kanpur)
 - Developed the software that has been used (since the year 2000) for conducting the Graduate Aptitude Test in Engineering (GATE), which is used for admission in graduate schools in India.

Talks

- 2008 - *Mining Context for Recognizing People in Images*, Computer Science Department, University of Rochester.
- *Mining Context for Visual Person-Recognition*, Information Session for Research Experience for Undergraduates Program, UMass.
- 2007 - *Understanding Sports Images by Identifying and Characterizing the Playing Surface*, Kodak Research Labs, Rochester NY
- *People-LDA: Anchoring Topics to People using Face Recognition*, Machine Learning Friends' Lunch, UMass.
- 2006 - *An Approximate Algorithm for Parsing Free-form Addresses*, Microsoft Research, Redmond WA

Technical Skills

- Languages: C, C++, Java, Perl.
- Toolkits / Libraries: MATLAB, OpenGL, OpenCV.