

## Research Interests

My primary focus is on Machine Learning, Semi-supervised Learning and Handwriting Recognition. Web 2.0 technologies interest me and I develop web applications for fun. I am also a mobile development enthusiast.

## Education

2009–present **Master of Science (by Research) in Computer Science & Engineering**,  
*International Institute of Information Technology*, Hyderabad.

advisor Dr. Anoop M. Namboodiri

2005–2009 **Bachelor of Technology in Computer Science & Engineering**, *SASTRA University*, Thanjavur, CGPA:9.0675/10.

## Experience

### Research

Aug 09–present **Research Assistant**, *CVIT, IIIT*, Hyderabad.

- Developed Handwriting Recognition Systems in Indian Scripts for touch devices.
- Built efficient classifiers that combine unlabeled and labeled data.
- Investigation of Dynamic Time Warping techniques for representation of strokes.
- Authored self-study content for students of Pattern Recognition Course.
- Contributed to the Virtual Labs Project (Ministry of Human Resource Development-MHRD, Govt. of India) by developing simulations for Pattern Recognition concepts

May 09–Jul 09 **Research Intern**, *CVIT, IIIT*, Hyderabad.

- Validated use of certain Support Vector Machine techniques to deal with multiple-class problems.
- Investigated a hybrid approach to combine DDAG and BHDT for SVMs.

Apr 07–May 09 **Project Assistant**, *TIFAC-CORE, SASTRA*, Thanjavur.

- Successfully completed several projects related to applications of artificial intelligence & image processing.

### Miscellaneous

Apr 10–present **Part-time Software Developer**, *Crypsis Technologies*, Hyderabad.

- Developed cross-platform mobile applications with Ruby on Rhodes.
- Presently working on Ruby on Rails for social collaboration websites.

Jan 10 –present **Teaching Assistant**, *IIIT*, Hyderabad.

- Statistical Methods in AI - for undergraduate and postgraduate students
- Software Technologies Course - for postgraduate students

## Publications

Amit Arora, Anoop M. Namboodiri, “A Hybrid Model for Recognition of Online Handwriting in Indian Scripts”, 12th International Conference on Frontiers in Handwriting Recognition, pp:433-438, doi: 10.1109/icfhr.2010.74, 2010

R. Muthaiah, K. Neela Kantan, V. Sharma, A. Arora, “Image Compression and Reconstruction using Cubic Spline Interpolation Technique”, American Journal of Applied Sciences 5 (11), pp:1562- 1565, ISSN 1546-9239, 2008

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## Major Projects

- Jun 09–Apr 10 **Online Handwriting Recognition, CVIT, IIIT Hyderabad.**  
Project funded by Technology Development in Indian Languages (TDIL), DIT, Government of India. Developed Online Handwriting Recognition system for Malayalam and Telugu with high accuracies on a large corpus.
- Sep 08–May 09 **Feature Extraction from Multispectral Images, SASTRA University.**  
Project funded by DRDL, Hyderabad. Design and development of techniques for using multispectral data to improve accuracies of camera mounted missiles.
- Dec 07–Sep 08 **Feature Extraction for Aerial Images, SASTRA University.**  
Project funded by Speck Systems, Hyderabad. Detection of a given topology in satellite maps.
- Apr 07–Dec 07 **Artificial Intelligence for Aerodynamic Targets, SASTRA University.**  
Project funded by DRDO, Hyderabad. Detection of aerodynamic targets with the help of RADAR parameters.

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## Computer skills

Languages	C, C++, Java	Web	JavaScript, PHP, RoR, jQuery
Libraries	Qt, libSVM, OpenCV	Databases	MySQL, SQLite
Tools	MATLAB, LNKNET	OS	Linux, Windows

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## Advanced Courses

Machine Learning, Computer Vision, Digital Image Processing, Artificial Neural Networks

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## Honors and Awards

- Jan 2010 Best Hack - Yahoo HackU – IIIT Hyderabad
- 2005-09 Best Outgoing Student (Computer Science) – SASTRA University
- Apr 2009 Prof. R. Sethuraman Award – SASTRA University
- Apr 2009 Best Outgoing Programmer – SASTRA University
- 2005-06,2006-07 Dean's List (Top 2%) – SASTRA University
- Mar 2003 0.1% Merit Certificate – CBSE

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## Other Activities

- Feb 2009 Principal Organiser, DAKSH 2009, Annual Technical Fest of SASTRA University
- Jan 08–May 09 Web Design & Administration – [www.sastra.edu](http://www.sastra.edu)
- Sep 06–Feb 08 Web Design & Administration – [www.dakshh.sastra.edu](http://www.dakshh.sastra.edu)
- Dec 02–Mar 05 Web Design & Administration – [www.puranchandravidyaniketan.com](http://www.puranchandravidyaniketan.com)
- Jun 07–May 08 General Secretary, Association of Computer Engineers(ACE), Department of CSE, SASTRA University

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## Interests

- Coding Online Programming Puzzles
- Sports Badminton and Basketball
- Gaming Counter-strike and NFS