

# dinesh govindaraj

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## EDUCATION

- 2009 **Master of Engineering in Computer Science.**, *Department of Computer Science and Automation*, Indian Institute of Science, Bangalore.  
Home: <http://www.csa.iisc.ernet.in>.  
CGPA: 7.1 out of 8.0
- Master Thesis**  
supervisor Professors. Chiranjib Bhattacharyya
- 2006 **B.E. in Computer Science and Engineering**, *Department of Computer Science and Engineering*, PSG College of Technology, Coimbatore.  
Home: <http://www.cse.psgtech.edu>.  
CGPA: 8.8 out of 10.0

## EMPLOYMENT HISTORY

- July 2009 – Worked as researcher at Bell Labs Research, India. Working on mobile crowdsourcing platform where i involved in development of complete back-end in Java. Filed two patents as a part of project. As my personal research activity i developed a image similarity portal. Using this portal user can retrieve similar images from the database corresponding to the given image. I have also created a system for automatic face morphing and created facebook application for the same.
- Aug 2006 – July 2007 Worked as software engineer at Cisco Systems for a period of 11 months before joining IISc for my masters. Worked as developer for TL1(Transaction Language 1) which is used as management console for optical networks. Developed new commands for TL1 protocol for creating and controlling OSI tunneling. Commands are shipped in Cisco Optical product 15454 in release 9.0.
- Nov 2005 – May 2006 Worked as Intern at Intel Technology for a period of 5 month. Developed Enterprise Access Management(EAM) Support Tool using asp.net. This support tool is used by the admin to perform various admin operations in EAM. EAM is access management tool which is internally used in Intel for providing access to various systems/server.

## PROJECTS

- **Automated Face Morphing using Active Appearance Models:** Performs automatic face morphing. For example software automatically puts user's face in place of spiderman's face. Used state-of-the-art Active Appearance Models so that morphing can be performed on any generic with high accuracy. I have created and opened a facebook application for the facemorphing.
- **Image Recognition:** As part of my master thesis, i have worked on recognizing the objects in the given image. We have come with new formulation for classifying the given image which achieved the start-of-the-art accuracy. This work has been published in Top Machine Learning Conference.
- **Image Similarity Search:** Image Similarity is find similar images for a given image in a collection of database of images. Collection used in the prototype contains 101 categories of objects like chair, people, car etc in it. There are 1530 images in the collection. System retrieves similar images with accuracy of 65%.
- **Automatic Highlights Extraction from Cricket Video:** Developed a system which automatically extracts the highlights from a given cricket video. Highlights are sixes, fours and wickets in a match. System extracts highlights with more than 95% accuracy.

- **Mobile Car Game:** Developed a simple mobile car game using Mobile 3D Graphics(M3G) and OpenGL Embedded System(OpenGL ES). Some features of the car game are animated accident and contains two levels.
- **Distributed File Searching:2004** Developed a software using which user can search for a file in a local network or LAN. File searching is done using Java Threads in a distributed manner. This software performs search faster than Microsoft Windows 98 search.

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## PUBLICATIONS

- *On the Algorithms and Applications of a mixed-norm regularization based Kernel Learning Formulation.*, Saketha Nath, G. Dinesh, S.Raman, Chiranjib Bhattacharyya, K.R. Ramakrishnan, Ben-Tal, Advances in NIPS, 2009.
- *Sparse Classifier Design Using Shapley Value.*, Prashanth Ravipally, G. Dinesh, International Conference on Data Mining and Knowledge Engineering, 2010.
- *Towards enabling a ubiquitous, efficient, and easy-to-use mobile crowdsourcing service in emerging market.*, G. Dinesh, Animesh Nandhi, Naidu KVM, Girija Narlikar, Bell Labs Technical Journal, 2011.

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## PATENTS (FILED)

- *A system for selecting users in a mobile crowd sourcing system.*, G. Dinesh, Animesh Nandi, KVM Naidu, Girija Narlikar.
- *A system to expose mobile subscriber data with compromising privacy.*, KVM Naidu, G. Dinesh, Animesh Nandi, Girija Narlikar.

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## PROGRAMMING LANGUAGES

- Proficient in C, C++ and Java
- Proficient in PHP and MySQL
- Matlab is used for research experiments
- Proficient in using OpenCV library and other machine learning tools
- Have done very little programming in Perl and Python

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## OTHER ACTIVITIES

- All India Rank of 52 in Graduate Aptitude Test for Engineer(GATE)
- Participated in Google Summer of Code, 2008
- Participated in Funding Prediction Problem in Topcoder(15th Place)

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## REFERENCES

- Will provided on request.