

Praveen Durairaj

32, 3rd Trust Cross St, Mandavelipakkam
Chennai 600 028 INDIA

Email: praveendurairaj@gmail.com
Phone: +91 (444) 303 – 3332

Summary

- Senior year Computer Science student at College of Engineering- Guindy at Anna University India.
- Strong research interests and publications in Networks and Artificial Intelligence

Education

B.E (Computer Science & Engg)	College of Engg Guindy - Anna University	GPA 8.62	2006
Higher Secondary School	TN State Board of Hr Secondary Education	96.4%	2002
Secondary School	Central Board of Sr Secondary Education	89.6	2000

Skills

Operating Systems	Windows XP/NT, Unix (Sun Solaris 7, HP-UX 10.20)
Languages	C, C++, Visual C++, Visual Basic, Java, HTML, Unix Shell
Tools	MS Office, Oracle
Technology	SMTP, 802.11

Publications

- '*Improving the Latency of 802.11 Hand-offs Using Sentinel Based Architecture*', International Conference on High Performance Computing (HIPC), Goa , India 2005

Research Work / Projects

Sentinel Based Architecture for Wireless Network Management

- Clients of a Wireless Network and dedicated Stationary Sensors collaborate to monitor the Wireless Network
- Used trajectory prediction to train the system
- Improved 802.11 hand-offs by finding efficient hand-off regions
- Used location determination in training phase
- Detected rogue access points and helped disconnected clients to reconnect

Offline Mail Client

- Designed and developed interactive UI for an offline mail client
- Synchronized offline store/content in mail client with the mail server on a change trigger
- Used SMTP mail servers
- Implemented a Message Store Provider along with search facilities
- Provided support for an Address Book
- Synchronized personal store with mail server with the help of an implemented Background Synchronizer

Image Analysis and Strategy Making for Robotic Football

- Analyzed a robotic football field using the image taken from top of the field
- Formed an efficient strategy and heuristics for the robots' motion using graph theory concepts
- Used image processing techniques to approximate robot and ball positions and find the situation of the game (offense/defense)
- Formed various frames of complete graph with robot and goal
- Found the best frame using shortest path, cut-set and other heuristics
- Implemented a graphical interface to show run time analysis

Moment Based Tamil Character Recognition

- Designed a moment based nearest neighbor classification for Tamil character recognition
- Works effectively with printed Tamil characters
- Implemented a training phase to train any character set before beginning recognition
- Implemented image thresholding and noise removal as part of image pre-processing
- Used character thinning and size normalization
- Used Hu's invariant moments for feature extraction

Achievements

- 5th position in the Asian Regional Finals of the 30th ACM Inter College Programming Contest held at Kolkata India
- Awarded Gold medal for achieving a perfect score in Math in Higher Secondary Examination 2002 by Indian Institute of Professional Education
- 2nd position in National Debate Competition 2001 conducted by the National Council of Educational Research & Training
- Awarded 'Best Speaker' at the International Debate Competition 2004 conducted by Institute of Biotechnology and Applied Bioinformatics and BIOCON Bangalore India

Honors/Positions

- Executive member of ACM Chapter of CEG (2005 – 2006)
- Conducted intra college ACM programming contest through the ACM Chapter at Anna University
- Executive Committee Member to conduct inter-college competitions for ABACUS 2004, SYNC 2004 and inter-school competitions for PRODIGY 2005
- Moderated group discussion in university radio *Anna FM*, India's first campus community radio