

RESUME

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Academics

Bachelor of Engg. **College of Engineering Guindy, Anna University (2002-2006)**
(Computer Science and Engineering)
CGPA: 9.781/10 (Upto 6th semester)
Rank 1 out of 180 students

Semester	I	II	III	IV	V	VI
GPA (Out of 10)	9.92	9.417	9.846	9.64	10	9.864

12th Standard **SBIOA Model School, Chennai (2001-2002)**
Percentage Secured: 96.16%
Engineering Entrance cut-off: 298.43/300 (Rank 17 in the state)

10th Standard **SBOA School and Junior College, Chennai (1999-2000)**
Percentage Secured: 89.4%

Research Interests

- Wireless Networks
- Network Security, Network Management
- Artificial Intelligence

Publications

1. Paramvir Bahl, Jitendra Padhye, Lenin Ravindranath, Manpreet Singh, Alec Wolman, and Brian Zill, "**DAIR: A Framework for Managing Enterprise Wireless Networks Using Desktop Infrastructure**", ACM Hotnets IV, College Park, November 2005.
2. Lenin Ravindranath, Fredrick Prashanth, Praveen D, Leo Prasath, Arul Siromoney, "**Improving the Latency of 802.11 Hand-offs using Sentinel based Architecture**", International Conference on High Performance Computing, Goa, December 2005.
3. Paramvir Bahl, Jitendra Padhye, Lenin Ravindranath, Ranveer Chandra, Manpreet Singh, Alec Wolman and Brian Zill, "**Enhancing Security of Corporate WiFi Networks Using DAIR**", submitted to MobiSys 2006.

Research and Internship Experience

- May - July 2005 **Internship at Microsoft Research, Redmond, US**
Worked with Networking Research group on the DAIR research project which detects and diagnoses faults in a Wireless LAN network.
- May - July 2004 **Internship at Microsoft India R&D, Hyderabad.**
Worked as an SDE with the Outlook Express team in implementing an Outlook Connector Framework.

Teaching Experience

1. “**Programming Basic and C**” course for the 1st year students of Anna University through the Computer Society of Anna University, Sep-Dec 2005.
2. “**Technical Project and Paper Orientation**” class for the Engineering students of Anna University through the Computer Society, Dec 2004.
3. “**Data Structures**” classes for Computer Science department students.

Skills

Languages	C, C++, Visual Basic, C#.NET, UNIX shell Programming,
Databases	Oracle
Operating Systems	Windows9x/2K/XP, Linux
Packages	MS Office

Projects

DAIR for detecting and diagnosing faults in Corporate Wireless Networks - Microsoft Research

I worked with the Alec Wolman, Victor Bahl and Jitu Padhye of Network Research group in designing and implementing the DAIR (Dense Array of Inexpensive Radios) framework which detects basic faults in Corporate Wireless Networks. We published our work in ACM Hotnets-IV titled “DAIR: A Framework for Managing Enterprise Wireless Networks Using Desktop Infrastructure” and also submitted our work to MobiSys 2006.

Sentinel based Architecture for Wireless Network Management - Final Year (BE) Project

We are working on an Architecture for monitoring the WLAN network for Location Determination, Trajectory Prediction and Efficient Hand-offs along with diagnosing faults. Our preliminary work has been published in the International Conference on High Performance Computing 2005 titled “Improving the Latency of 802.11 Hand-offs using Sentinel based Architecture”.

Offline Mail Client (in C#.NET)

The offline mail client synchronizes the offline store with the mail server whenever there is a change. I implemented various features such as Address book, Mail Search and Interactive user interface.

Image Analysis and Strategy Making for Robotic Football

The project analyses a robotic football field using the image taken from the top of the field and forms an efficient strategy for the robots motion using graph theory concepts.

Moment Based Tamil Character Recognition

A moment based nearest neighbour classification technique for Tamil Character Recognition. It works effectively with printed Tamil characters. There is training phase to train any character set before we start recognising that character set.

Outlook Connector Framework - Microsoft India R & D

The project was on building an Outlook Connector Framework so that any provider like Yahoo, AOL can use this framework to connect to Outlook just by filling in specific modules instead of building the connector from scratch. The connector was built on COM and MAPI specifications.

Patient Fall Identification for Continuous Assistance and Risk monitoring for Elderly (in C#)

This project involves monitoring a patient in bed using a video camera and analysing various behaviours such as a fall from the bed etc. We submitted this project work to “Microsoft Windows Challenge 2005” competition.

Other Academic Projects

- Lexical Analyser, Parser and Intermediate Code Generator for C like Language (in C)
- Dynamic Cache Replacement Policy for SMT Processors (in SS SMT simulator)
- Polymorphic Compression Algorithm for Text File Compression.
- Assembler and Macro processor for SIC (XE) (in C)
- Implementation and Analysis of various AI search techniques to solve the 8-puzzle game
- Accounting and Registration software of the Computer Society of Anna University
- An automatic on-off controller (Electronics project)

Awards and Honours

- One of the eight undergraduates selected for the Microsoft Research Internship at Redmond through the India Intern Program (Summer 2005).
- First Rank in the Department among 120 students and in the University among 800 students with a CGPA of 9.781/10.
- Awarded Annual day award for highest CGPA till 5th Semester.
- Awarded Alumni association award for highest CGPA in the 2nd year.
- Awarded HIPC 2005 Scholarship based on Merit and Research Experience.
- Ranked 17 out of 100,000 students in the state in Tamil Nadu Engineering Entrance Examination 2002 with a cut-off of 298.43/300.
- Awarded Proficiency by the Former Chief Minister of TamilNadu M. Karunanidhi for securing Centum in Maths, Physics and Chemistry in the Higher Secondary Examination 2002.
- Awarded Medal and Proficiency by Indian Institute of Professional Education for securing centum in Maths, Physics and Chemistry and scoring 98.43 in Engineering Entrance.

Prizes Won

- 5th Place in the Asia Regional Finals of the 30th ACM ICPC Programming contest held at Kolkatta, India.
- 1st prize in the inter-college programming contest conducted by MIT, Chennai.
- 1st Prize in intra-college programming contest in SYNC 2004.
- 1st Prize in intra-college programming contest in SYNC 2003.
- 2nd prize in software presentation contest at Techshow 2003 conducted by Computer Society of Anna University.
- 1st prize in Radiation Physics Quiz contest conducted by the Kalpakkam Chapter 2001.
- Finalist of “Talk your way to Japan” Tamil elocution Contest.
- Won many prizes in quiz and elocution competitions in school.

Extra and Co-Curricular Activities

- President of the Computer Society of Anna University (2005-2006)
- Vice President in-charge of projects of the Computer Society of Anna University (2004-2005).
- Executive Member of the ACM Chapter of Anna University (2005-2006)
- Conducted intra college ACM programming contests for CEG students through the ACM Chapter of Anna University.
- Executive Committee member to conduct inter-school competitions in SPARKS 2002, SPARKS 2003, SPARKS 2004, SPARKS 2005.
- Conducted the Programming Contest (SOFTTALK 2004, SOFTTALK 2005), Project presentation contest (TECHSHOW 2004, TECHSHOW January 2005 and TECHSHOW July 2005), and intra-college competitions for the freshers (EUREKA 2003, BRAINSCAN 2005).
- Judge for Paper Presentation at TECHSHOW 2005, Project Presentation at AGNI 2005 (intra-college symposium)
- Member of NSS.