



Ameya Ajit Ranade
Computer Science and Engineering
IIT Bombay
Specialization: Computer Science

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B.Tech
Male
DOB: 17 May 1987

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2009	8.10
Intermediate/+2	Maharashtra Board	S.B. College of Science	2004	84.83
Matriculation	Maharashtra Board	S.B. High School	2002	88.4

SCHOLASTIC ACHIEVEMENTS

- **State Top 1%** in **Regional Physics Olympiad** 2003-04 in Maharashtra
- Ranked **7th** in **Regional Mathematics Olympiad** 2003-04 in Maharashtra and Goa region
- Recipient of prestigious **National Talent Search Examination (NTSE)** scholarship for year 2002
- Secured All India rank **37** from more than **2,00,000** aspirants of **IIT-JEE** 2005
- Secured All India Rank **49** and state rank **4** in **AIEEE** 2005
- Amongst **350** recipients of prestigious **CBSE Merit Scholarship** (2005-09) all over India
- Recipient of Maharashtra Talent Search Examination (**MTSE**) Scholarship in 8th and 9th std.
- Placed **first** in Mathematics in SSC 2002(Std. 10th) in Maharashtra State scoring **150/150** marks

INTERNSHIP AND PROJECTS

Serve Performance testing of Google Search Appliance (GSA)

Manager: Mr. Krishkumar Gopalkrishnan

May 2008 - July 2008

- Created **automated serve performance testing** mechanism for GSA which tests performance of frontend serving of GSA and developed secure mechanism for porting index made by GSA
- **First ever intern** to present **Technological Talk** in front of Google Hyderabad Engineering team.
- **Facilitated** fast automated testing and creation of backup repositories of index on other GSA
- Obtained more than **10 times improvement** in runtime of serve performance testing over existing non-automated testing mechanism

List Coloring of Graphs

Guide: Prof. A. A. Diwan

Seminar, Spring 2008

- Studied research papers related to list vertex coloring of **planar graphs** and their chromatic numbers
- Made **extensive literature survey** on list edge coloring of **bipartite** and **series-parallel graphs**
- Concluded with relationships between list edge chromatic number and edge chromatic number of these special types of graph

Solving problems related to Graph Coloring

Guide: Prof. A. A. Diwan

B. Tech. Project (ongoing)

- **Solving** some existing **unsolved problems** in graph theory related to **coloring** of graphs.
- Working towards establishing relationship between lengths of cycles in graph, connectivity in graphs with upper bound on chromatic number of graphs

OTHER ACADEMIC PROJECTS

Su-Doku Solver

Advisor: Prof. Amitabh Sanyal

Spring 2006

- Created program to solve Su-Doku puzzle with GUI at front-end using LISP language.
- Worked on all common **solving strategy algorithms**, coded brute force algorithms that use **depth first search** and graphical interface part.
- Proposed a model which could solve puzzles with more than 20 input digits in **less than 10ms**.

Data-Compressor

Advisor: Prof. Jayanta Mukharjee

Spring 2007

- Developed an algorithm for digital data compression
- Created a **digital circuit** which converts stream of input bits into **compressed** output stream

Committee Management System

Advisor: Prof. Umesh Bellur

Autumn 2007

- Created database software to store committee specific entities like members, meetings, reports and posts.
- Provided **functionalities** to manage posts according to post holding constraints, organize meetings, store reports and creating new logins for a committee
- Involved in creating style sheet, **error handling** of complete project, verification of database and creation of basic **ER diagram**

T-chat

Advisor: Prof. Sudarshan

Spring 2007

- Created **Instant Messaging software** in JAVA resembling with most commonly used chatting softwares with **file sharing** feature implemented in it.
- **Devised a database** for storing login ID's, passwords and status of users
- Created GUI containing logging in and registration options, friend list with respective status, font and color options and file sharing function.

Path Finder

Advisor: Prof. Sharat Chandran

Autumn 2005

- Created program in C++ with GUI interface that finds **shortest path(s)** in a city of the form of maze with given walls in city and starting, finishing points.
- Wrote **flood-fill** algorithm to solve the graph of the city involving **breadth first search** and worked towards **error handling** of the main project.

PROGRAMMING SKILLS

- Programming Languages : Python, C/C++, Java, LISP, VHDL
- Web Development : Servlets / JSPs , JavaScript
- Operating Systems : Windows 2000/XP , Linux
- Tools : JDBC, SQL, Eclipse

POSITIONS OF RESPONSIBILITY

Hostel Cultural Councilor, 2007-08

- Elected by around **400** students to lead a team of **8** secretaries to represent hostel in various cultural activities inside the institute
- Part of the **Institute Cultural Council**, highest body governing all cultural activities of the Institute
- Conducted **9** intra hostel cultural events with a total budget of **Rs. 52,000**
- Initiated **dance classes** and brought microphone, amplifier and flute in hostel during my tenure
- Hostel secured **2nd** position in **Performing Arts Festival, 08**
- Hostel secured **4th** position in **Cultural General Championship, 2007-08**

Coordinator, Techfest 2007

- Led a group of **6** organizers during Techfest 2007
- Set Local Area Network (**LAN**) at all event locations during Techfest

Secretary, school student council, S.B. High School, 2001

- **Organized** various cultural and sports events and **convened** meetings of 21 class representatives
- Received **award** for most participating student in Non-academic Activities during my tenure

EXTRA CURRICULAR ACTIVITIES

Awards

- **Two** times recipient of **Hostel Color** (2007-08) for contribution in **Performing Arts Festival**
- Received **special mention** twice (2007-08) for valuable contribution in hostel **cultural** activities

Fine Arts

- Secured **2nd** position in fine-arts competition from batch of more than **500** freshmen
- Secured **1st** position in inter school fine-arts competition 1999

Dramatics

- Acted in One-act-play "Lal-Chikhal" which won in 5 competitions at state level and also presented in "**Akhil Bhartiya Marathi Natya Parishad**"
- Secured **3rd** position in Inter hostel dramatics competition 2007