Akshay Jain

Computer Science & Engineering

Indian Institute of Technology, Hyderabad

CS09B002

UG Second Year

Male

DOB: 10/11/1991

Education

Examination	University	Institute	Year	CPI /%
Graduation	IIT Hyderabad	IIT Hyderabad	2010	8.4
Intermediate/+2	CBSE	Central Academy ,Kota	2009	89
Matriculation	RBSE	Central Academy , Jodhpur	2007	86.66

Academic Achievements

- Secured an **All India Rank of 2357** in **IITJEE 2009** among 0.4 million students.
- Secured an **All India Rank of 1500** in **AIEEE 2009** among nearly 1million students.

Research Interests

Algorithms, Discrete Mathematics

Key Academic Projects

➢ **Data Compression and Decompression :**
- Functional programming (in **C++**) for **Lossless Compression** of Text-Files using **Huffman Encoding** technique.
- Implemented an optimal combination of **Min Heaps and Binary Search Trees** for dealing with text-data. Achieved **data compression ratio** of about **40-50%.**
- Developed **user friendly GUI** for easy usability of the program.

➢ **External Memory Sorting:**
- Created a program (in **C++**) for **Sorting** large Text-Files that **do not fit in main memory**.
- Implemented using **Quick Sort, Merge Sort and Binary Heaps**.

Computer Proficiency

➢ Platforms   : Windows, Linux(Ubuntu, Fedora)
➢ Languages   : C/C++, HTML, VHDL, Java (Basic level)
➢ Hardware Skills : Undergone Lab Courses in Digital Circuit Design and Microprocessor
                          Programming and has understanding of basic architecture of microprocessor.

Relevant Undergraduate Courses

- **Core Courses**:
  - Discrete Mathematics
  - Data Structures and Algorithms
  - Theory of Computation
  - Digital Systems Design
  - Computer Organization & Design
  - Programming Lab

- **Mathematics** :
  - Multivariable Calculus
  - Differential Equations
  - Linear Algebra
  - Probability & Statistics

Positions of Responsibility

- **Core member of Elan 2011** team. Elan is the inter-collegiate annual technical-cum cultural festival of IIT Hyderabad.
- **Class Representative** of the batch for year **2009-2010**.
- Member of **Dining Hall Committee** for year **2010-2011**.The committee oversees the catering contract for the student hotels at IITH.

Extracurricular Activities

- Part of the NSS (National Service Scheme) in the first year. Taught young children in various schools around the campus.
- Member of **Institute's NSO Football team** for year **2011**.

Declaration

I hereby declare that all the information given above is true and to the best of my knowledge.

Date : 28-03-2011   **(AKSHAY JAIN)**