

Kunal Singhal

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Education

Indian Institute of Technology Delhi

Bachelor of Technology

CGPA: 9.56

New Delhi, India

2012 - 2016 (*expected*)

Relevant Courses Taken

Computer Architecture	Design Practices in Computer Science	Digital Electronic Circuits
Data Structures	Discrete Mathematical Structures	Combinatorics
Calculus and Analysis	Linear Algebra and Matrices	Quantum Physics*
Programming Languages*	Artificial Intelligence*	Cryptography*
Probability Theory and Stochastic Processes*		Machine Learning#
Algorithms#		

*Pursuing in spring 2014 #Online Courses at coursera.org

Awards, Grants & Honours

International Olympiad in Informatics 2012

Indian Team Member

JULY 2012

International Physics Olympiad 2012

Silver Award

JULY 2012

Asian Physics Olympiad 2012

Silver Award

MAY 2012

Indian National Mathematics Olympiad 2011

All India First Position

2011

Institute Silver Medal for Academic Excellence

Given for obtaining highest CGPA at IIT Delhi

FEB 2013

IIT-JEE 2012 All India Rank 18

Got 18th rank among more than 500,000 students

MAY 2012

Aditya Birla Scholarship 2012

Given only to 15 engineering students all India

SEP 2012

OP Jindal Engineering and Management Scholarship 2012

Given to one student of each Year

SEP 2012

KVPY Scholarship 2011

Scholarship given for encouraging science students

2011

AIEEE 2012 All India Rank 19

Got 19th position among over 1 million students.

MAY 2012

Projects

- **3D bike race game**

Prof. Subodh Kumar, 2012

- Used OpenGL as graphics library.
- A dedicated physics engine was programmed.
- A database for High Scores is maintained.
- Used frustum culling for enhancing the game speed.

- **Assembly Emulator**

Prof. Smruti Ranjan Sarangi, 2012

- Supports ARM assembly and SimpleRisc Assembly codes.
- Supports free flow of the code.
- Python's high order techniques like lambda functions, maps and filters used for programming the emulator.

- **Social Network Simulation and Analysis**

Prof. Subodh Kumar, 2012

- Multiprocessing and multithread used to achieve simulation.
- Inter process communication is established by **Message Queues**
- Final network after the simulation is stored as a graphml file.
- In the analysis of the network, various queries such as shortest path, importance and clique size can be performed.

Sport Programming

- Indian team member in **International Olympiad in Informatics, 2012**
- My team (team Angle) **ranked 9th in ICPC Amritapuri Regionals**. Best in IIT Delhi.
- Codechef handle : knsn1994
- TopCoder handle : knsn1994

Designing and Coding Skills

Extensive	PYTHON, C++
Intermediate	HTML5, CSS3, JAVASCRIPT, C, PHP, L ^A T _E X, JAVA, SQL, BASH, NUMPY
Basic	DJANGO FRAMEWORK, APPLE SCRIPT, STANDARD ML, BASIC, PERL

Community Involvement

- Representative at ACES (Association of Computer Engineers, IIT Delhi)
- Member of Electronics Club, IIT Delhi
- Class Convener at IIT Delhi

Other Interests

- I have keen interest in human psychology and philosophy. I also write a blog: Phryders.
- I love to play Guitar and Synth.
- I am a part of my hostel Dance Club.