Amit Kumar Singh   09004009

Civil Engineering   UG Third Year (B.Tech.)

Indian Institute of Technology, Bombay   Male

DOB: 13-Dec-1990

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2011	8.08
Intermediate/+2	CBSE (AISSCE)	K.V.1STC,Jabalpur	2009	91.40
Matriculation	CBSE (AISSE)	K.V.Cantt Kanpur	2007	93.80

Pursuing B-tech with Honours in Civil Engineering

Academic Projects

Winner of **Tower Of Babylon**   [Feb 2011- June 2011]

(*An interdisciplinary competition between Five Members Of Global Alliance of Technological Universities, IIT Bombay, ETH Zurich Switzerland, Georgia Institute of Technology Atlanta, NTU Singapore, SJTU Shanghai China*)

- Team of 14 Members to design and construct a iconic and sustainable structure within a budget of $1000, using readily available eco-friendly material
- Design and built a 12-feet tilted kettle-shaped hexagonal structure, surrounded by three 3.5-feet tall cups which could be used for rain water harvesting as well as a canteen giving an impression of tea being served into cup. Structure was made using Bamboos, waste tires, bottles, clay tiles and cement. Structure was designed considering wind loads and service loads and Modularity of structure makes it very easy to dismantle
- Design and maintain IIT Bombay team project website for constant updates and Judging during competition

Sakshat virtual labs, Urban Transportation System Engineering Lab:

Under Dr. Gopal Rao Patil, Department of Civil Engineering, IIT Bombay   [Dec 2010-ongoing]

- Worked with 3 members to prepare a program using **HTML, PHP** for the preliminary statistical analysis for Trip Generations data, develop regression based Trip Generation (Production & Attraction) models and their graphical representation   [Dec 2010]
- Developed a Program for All or Nothing Assignment , User Equilibrium Assignment and System optimization using Convex combination methods for optimization for Travel time analysis in Transportation Network Modelling   [Jan 2011-May2011]
- Developed a Program for Stochastic User Equilibrium Assignment using Logit method (Dial's algorithm), Probit method , Method of successive averages and Critical gap Analysis using maximum likelihood method for Intersection Analysis   [June2011-July 2011]

Finger -Print Recognisation: [Aug2009-Nov2009]

Under Prof. D.B.Phatak, Department of Computer Science and Engineering, IIT Bombay

- Worked with 5 members and prepare a program using *C++* for duplicate checking of finger print as a Part of CS101 Project. Programmed a code which can measure distance between two nodes and ridges of fingerprint and compare it with data given in database to check duplicity of Finger Print

Scholastic Achievements

- Awarded the **Merit Scholarship** by **ESSA** ,New Delhi (ARMY) for being placed in **All-India Merit list** For B-Tech First Year and Academic year 2006-07, 2007-08, 2008-09
- Scored an **All-India Rank** of **1037** and the All India Engineering Entrance Examination (AIEEE) 2009 with 320/430 marks
- **First rank** in school out of 200 students in 10th board Examination (AISSE), 2007 with **93.8%** marks and 12th board Examination (AISSCE),2009 with **91.4%** marks

Techfest IIT Bombay, Asia largest Science and Technology festival
- Worked as Organiser in Techfest 2010 , was responsible for handling and helping in smooth functioning of events in Hospitality Department .
- Worked as Co-ordinator in Techfest 2011,was responsible managing events of Hospitality Department along with 10 members and nearly 30 organisers.

Computer Skills
- **Programming languages:** *PHP, Visual Basic, AutoCAD, C, Basic C++ , HTML, JavaScript, Advance DHTML*
- **Operating systems:** MS Windows

Olympiads
- Distinctive Performance in   **5th National Science Olympiad**   [2003]
- **All India UN Information Test**, Recognized by United School Organization of India, Secured *84%* marks [2005]
- Represented School and Participated in **Green Olympiad** (Teri)   [2005]

Miscellaneous
Participated in two of **National Social Service** Programme
- EDUCATION OUTREACH:

  Teach IITB Campus School, basic Communication Skill, Mathematics and Science for a semester
- EVENTS:

  Visit Rural areas to know their life style, their problems and provided them with technical information, helping in improving their livelihood

Extracurricular Activities
- Awarded with Bronze medel for securing Third place in **Institute Football League** in 2010, played for team **Real Matrid**
- Performed a **Skit** on **Unity Of India** 0n Republic Day 2010 as a part of NSS activity
- Won freshe GC in 5km Crrosy

Relevant Courses Covered
- Solid Mechanics and Advance Solid Mechanics (honours)
- Structural mechanics and Engineering Mechanics
- Fluid Mechanics and Hydraulic Engineering
- Numerical Methods In civil Engineering (honours)
- Data Interpretation and Analysis