



**Soumil Agrawal**  
**Civil Engineering**  
**Indian Institute of Technology, Bombay**  
**Specialization: Structural Engineering**

**09D04003**  
**UG Third Year(Dual Degree )**  
**Male**  
**DOB: 24-June-1991**

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2012	8.73
Intermediate/+2	CBSE	Rajeev Gandhi Senior Secondary School	2009	88.20
Matriculation	CBSE	Delhi Public School	2007	89.20

#### SCHOLASTIC ACHIEVEMENTS

- **Department Rank 1** in the Dual Degree batch.
- Secured an **AIR 1502** in **IIT-JEE 2009**.
- Secured an **AIR 216** and **State rank 11** in **AIEEE 2009**.
- **CBSE Merit Scholarship** for meritorious performance in **AIEEE 2009** awarded to **top 250** students.
- Awarded **AA** grade in Departmental courses - **Engineering Mechanics, Solid Mechanics, Structural Mechanics and Design of Structures**.

#### INDUSTRIAL TRAINING

- **Hindustan Construction Company, Mumbai** (Dec 2011)  
Worked in a **7 member design team** under the **Asst. Vice President, Engineering** for the projects-
  - **Four Laning of the NH34 (Farakka-Raiganj) Highway, West Bengal**  
Designed and Analysed the pre-stressing details of a Box girder of Span 40m.  
Verified and Revised the design plans for indeterminacy and stability.
  - **Mughal Road (J&K) Project for the J&K PWD (Roads and Buildings)**  
Designed and Analysed the project and suggested cost cutting measures  
Studied the Drawings and prepared the Bill of Quantities (BOQ) for ensuring structural stability considering area specific factors.  
Researched on the two hinged Arches and it's feasibility as an alternative proposal as against the cast in-situ deck structure.

#### POSITIONS OF RESPONSIBILITY

- **Manager of National Civil Engineering Student's Symposium (NCESS)** (2011-2012)
  - Initiated the Poster Presentation event as part of the Symposium.
  - 150% increase in the participation for the symposium by means of widespread publicity.
- **3<sup>rd</sup> year Class Representative , Batch of 2009** (2011-2012)
  - Maintained excellent rapport between the faculty and students
  - Facilitated smooth communication between batch-mates and department related activities both academic and non-academic.
- **Coordinator in Mood Indigo 2010** (2010-2011)
  - Worked as a part of Informals and Pronites department.

#### RELEVANT COURSES

- **DEPARTMENT COURSES** - Design of Structures, Structural Mechanics, Soil Mechanics, Solid Mechanics, Engineering Mechanics and Fluid Mechanics.
- **TECHNICAL LABS** - Design and Software Lab, Design of Structures, Soil Mechanics, Experimentation and Measurements Lab, Solid Mechanics Lab, Geodesy Lab, Hydraulic Design Lab, Fluid Mechanics Lab, Mechanical Workshop and Engineering Drawing,
- **MATHS** - Calculus, Linear Algebra, Differential Equations (Ordinary and partial), Data analysis and Interpretation.
- **OTHERS** - Computer Programming and Utilization, Electrical and Electronic Circuits, Electricity and Magnetism, Chemistry and Economics.

## SOFTWARE SKILLS

- **Core Softwares** - AutoCAD, SAP and Etab.
- **Languages** - HTML.
- **Others** - Adobe Photoshop, MS-office, Flash and Dreamweaver.

## KEY PROJECTS

- **Central Water And Power Research Station, Pune** (May 2011)
  - Learnt Optimisation of port and harbour design by studying model of Mumbai.
  - Learnt long term changes in river platform, bed level, flood discharge analysis of river Ganga.
- **Mukesh Group of Companies** (Work visit under Prof. Tarun Kant, IIT Bombay) (Oct 2010)
  - Studied construction of beams and columns and explored Pre-stressed Concrete Method.
- **Mini UID project** (Guide: Prof D.B. Phatak ) (Aug-Nov 2009)
  - The project was a mock version of the National Unique Identity (UID) Project.
  - *Based on the Govt. of India initiative: Aadhaar*
  - Interpreted the idea by working on the C++ codes to access data and thumbprints from biometric sensing devices and deduce student relevant applications.
  - Biometric attendance system introduced for the batch incoming in 2011
- **Study of Market Structure** (Guide: Ms Haripriya Gundimeda) (July- Nov 2009)
  - Comparative study of the Soft drink Market including the major role players, demand supply.
  - Data analysis to draw relevant conclusions about use of preferences, loyalty and marketing.
  - strategies by surveys in the student community.
  - Suggested methods and changes for major players to maximize their profit.

## ADDITIONAL COURSES

- **Minor – Management**
  - **Finance and Accounting:** Understanding the basic principles of managerial accounting and analysed company's financial statement.
  - **Operations Management:** Learned overseeing, designing, and redesigning business operations in the production of goods and services.
  - **Marketing Management:** Broad spectrum analysis of consumption services and goods. To understand profit or nonprofit motive for customer's needs and wants in a better way and satisfy them through profitably.

## EXTRA CURRICULAR ACTIVITIES

- **Sports**
  - Part of Swimathon held at IIT Bombay completing 7.5kms in 6 hours.
  - Member of National Sports Organization (NSO) Swimming Team of IIT Bombay.
  - Member of Inter Hostel Squash Team.
- **Fine Arts**
  - Numerous sketches and portraits were displayed in Kaladarshan (Annual Arts exhibition of IIT Bombay)
  - Photoshop enthusiast – Editing images and photographs.
  - Part of music video making competition in the Institute.
- **Dance**
  - Member of Gyration – Inter hostel Dance competition.
  - Member of the winning dance team at Freshizza '09, the cultural festival for Freshmen Undergraduates in IIT Bombay.
- **Logical Reasoning Interests**
  - Can solve Rubik's Cube in less than 5 minutes
  - Avid interests in solving puzzles, crosswords and Sudoku.