



**Harsh Kiran Nisar**  
**Civil Engineering**  
**Indian Institute of Technology, Bombay**

**09004042**  
**UG Third Year (B.Tech.)**  
**Male**  
**DOB: 15/06/1991**

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2011	7.96
Intermediate/+2	CBSE	Vidya Mandir Sr. Sec School	2009	85.00
Matriculation	ICSE	LPHS	2007	91.00

#### **Academic achievements**

- Secured an All India Rank of 906 in IIT-JEE 2009
- Awarded the Certificate of Merit for excellence in Chemistry in school 2005
- Pursuing a minor degree in Industrial Design, at IDC, IIT Bombay
- Was ranked among the top 1% of the students who appeared for AIEEE '09 in Maharashtra
- Scored 95.5% in Math and Science in Class 10

#### **Practical Training and Internships**

- Site training at Jaipur Metro under DMRC, Jaipur – May-June, 2011
  - a. Examined the design parameters of pile loading and concrete composition under the Design Section of Jaipur Metro.
  - b. Conducted laboratory tests and calculated the tests results on the Mansarovar Yard site.
  - c. Compiled a report on the design details of the viaduct and 11 Jaipur Metro stations.
  - d. Assisted the Junior Engineers with on-site operations
  - e. Attended the Station Roof design proposal presented by the engineering and architecture firm Construction Catalysers
- Work Visit at CWPRS (Central Water and Power Research Station), Pune – February, 2011
  - a. Visualized various features in Indian ports through the Hydraulic Models of the Mumbai Port and the Jawaharlal Nehru Port, and the Kandla Port
  - b. Observed the design Breakwaters employed to survive the impact of sea waves
  - c. Went through Hydraulic models of Spillway and Energy dissipation methods in Hydro-electric projects
  - d. Saw the standardization and design Flow Probes used on marine vessels
- Work Visit at IT Business Park, Mumbai (Sterling Constructions) – August, 2010
  - a. Observed post-tensioning techniques in reinforced concrete structures
  - b. Witnessed the basic building construction techniques applied in modern structures
  - c. Interacted with the engineers and the construction workers

#### **Projects Undertaken**

- Finger Print Basis Identification in C++ (*Dr. D. B. Phatak, CSE*) – July to November, 2009:
  - a. Coded a program to check the uniqueness of the enrolled subject in every session
  - b. Accomplished task given to our team and contributed in the **Unique Identity Allocation Project** which was the prototype project upon which the AADHAAR UID Card is based.
- Design of a Locking Mechanism (*Prof. B. K. Chakravarty, IDC*) – September to November, 2010
  - a. Designed and built an enlarged plaster prototype of the spring based locking mechanism
- Sharing Taxi System for Mumbai Suburbs, (*Prof. Anirudha Joshi, IDC*) - January to April, 2011
  - a. Interviewed Taxi and Auto-rickshaw drivers and passengers for inputs
  - b. Designed a New Metre Card, Mobile and Web Application Interface Structure for users

### Technical Labs Experience

- Design Lab: Using IS Codes to establish member dimensions, reinforcement details, concrete grades
- Soil Mechanics Lab: Identifying the type of soil, and finding the permissible loads on a particular strata of soil
- Geodesy Lab: Studied surveying and the application of instruments like the theodolite, total station, GPS
- Hydraulic Design Lab: Familiarizing with basic hydraulic components like channels, Dam Seepage cross-sections and surface waves
- Solid Mechanics Lab: Assessment of internal forces and strains of a body and drawing stress-strain curves of basic materials as steel
- Fluid Mechanics Lab: Practical study and verification of laws of Fluid Mechanics
- Experiments and Measurement Lab: Learning basic electric components used in scientific measurement and experience with instrumentation electronics and data acquisition
- Engineering Graphics & Drawing: 3D geometry visualization, section views and technical drawing
- Workshop Practice: Studied and performed various mechanical techniques like welding, fitting, lathing and shaping

### Core Courses

Engineering Mechanics  
Fluid Mechanics  
Hydraulic Engineering  
Solid Mechanics  
Geodesy  
Structural Mechanics – I  
Structural Mechanics – II  
Soil Mechanics – I  
Design of Structures – I

### Others

Computer Programming and Utilization  
Electric and Electronic Circuits and Electricity and Magnetism  
Linear Algebra, Calculus and Differential Equations – I and II  
Economics, Environmental Studies and Psychology as a part of Curriculum from Humanities and Social Service Dept. (HSS)  
Introduction to Design, Design Issues and Human Computer Interaction as a part of Minor in Industrial Design Centre (IDC)

### Positions of Responsibility

Co-ordinator, Hospitality, Mood Indigo 2010[Apr – Dec ‘10]

### Key Extra Curricular Activities

- Was a part of NSS(National Service Scheme). Worked under the Group of Rural Activities
- Visited a remote village, Kapshi, to perceive the issues rural India, the way sustainable techniques are employed by villagers. Familiarized with the concept ‘Shram Daan’
- Involved in teaching academically weak school kids of the Kendriya Vidyalaya, IITB in the Educational Outreach program
- Participated in Poor-ani Jeans Clothes Collection Initiative to help collect used clothes for donation to needy
- Member of the winning production team in Performing Arts Festival, 2011(PAF)
- 1<sup>ST</sup> Prize in Treasure Hunt event in Freshizza (Inter Freshers event in IIT)
- Active Member of Pixels – Photography Club of IITB

### Computer Skill Set

Software: MS Office, Adobe Photoshop/GIMP, SCILAB, AutoCAD  
Familiar with Windows, Linux and Mac OSX systems