**Vikas Meena**
**Civil Engineering**
**Indian Institute of Technology, Bombay**
**Specialization: none**

**100040024**
**UG Third Year (B.Tech.)**
**Male**
**DOB: 17/10/1991**

| Examination | University | Institute | Year | CPI / % |
|---|---|---|---|---|
| Graduation | IIT Bombay | IIT Bombay | 2012 | 7.73 |
| Intermediate/+2 | CBSE | Cambridge Court High School | 2010 | 83.00 |
| Matriculation | CBSE | Cambridge Court High School | 2008 | 94.66 |

## SCHOLASTIC ACHIEVEMENTS

- Scored a **SPI** (Semester Performance Index) of **9.03/10** in fourth semester [2012]
- Secured **AA** grade **(10/10)** in **Hydraulic Engineering** (14 out of 116 students) and in **Hydraulic Design Lab** (12 out of 116 students) [2012]
- Was among **top 0.1%** students in 10th **CBSE** (Central Board of Secondary Education) board exam [2008]
- Awarded a **Certificate of Excellence** in NSTSE (National Level Science Talent Search Examination) [2008]

## KEY ACADEMIC PROJECTS

- **Numerical Simulation and Experimental Validation of water pump intake system for** [Dec 2011-12] **Indira Gandhi Super Thermal Power Project, Jhajjar**
  **Guided by Prof. Eldho T.I**. (Department of Civil Engineering, IIT Bombay)
  - **Designed** a scaled (1:12) **CFD** (Computational Fluid Dynamics) model of pump intake system using **ANSYS DesignModeler**
  - **Simulated** it using **ANSYS FLUENT** (CFD Solver) and **visualized** the streamlines pattern and vortices which are responsible for vibrations, cavitation and impeller damage
  - Currently **optimizing** Anti-Vortex Device design to reduce vortex formation, aiming for a **quick, low cost solution**
  - Presented poster on the above study in **UG Research Symposium 2012, IIT Bombay**

- **C++ Project** [2010]
  **Guided by Prof. Deepak B. Phatak** (Department of Computer Science and Engineering, IIT Bombay)
  - Worked in a team of 12 members to design **Snakes and Ladders** game using **C++** and **Ez Windows** and contributed in player's movement algorithm

## INTERNSHIPS

- **ANSYS Software Pvt. Ltd.** Bangalore, India [June-July 2012]
  - Created a report on role of **Engineering Simulation** in solving Turbomachinery, Automotive, Aerospace and Defense industries problems
  - Developed a **Market Analysis** report on **CAE** (Computer aided Engineering) field by studying the trends in Fluids, Mechanical and Electrical Business Units for 2010-11-12
  - **Competitive Analysis** through online and secondary research
  - Suggested **innovative ways of publicity** and few **improvements** in ANSYS Blog such as Google Translate, Conversation Box etc.
  - Gained valuable hands on experience by attending a 3 day workshop on ANSYS software

- **Pratibha Industries Ltd.,** Mumbai, India                                    [May-June 2012]
  Mahindra Eminente Construction Site
  - Gained some experience about project planning, designing, construction project management, quality control and billing
  - Learned various safety measures & lab testing procedures.

## RELEVANT COURSES UNDERTAKEN

- Engineering Mechanics | Solid Mechanics | Hydraulic Engineering | Fluid Mechanics | Geodesy | Numerical Methods | Water Resource Engineering | Soil Mechanics | Design of Concrete Structures | Structural Mechanics | Introduction to Renewable Technologies | Environmental Studies

## POSITIONS OF RESPONSIBILITY

- **Volunteer** in **Abhyasika, IIT Bombay**                                    [2012]
  - Helped school going children with homework and improved their basic concepts and foundation skills
- **Coordinator** in **Techfest 2012**, **IIT Bombay**                                    [2011]
  - Led a 10 member team to manage a competition event "**Potentia"** which saw participation of over 100 students

## TECHNICAL SKILLS

- Software proficiency:              ANSYS 13.0 (Static Structural, Thermal, FLUENT, Rigid body Dynamics, Explicit Dynamics), MATLAB, AutoCAD Civil 3D 2011, Microsoft Excel, SAP2000 v15
- Programming languages:          C++
- Web designing:                        HTML, CSS
- Operating system:                    Windows, Linux

## EXTRA-CURRICULAR ACTIVITIES AND OTHER ACHIEVEMENTS

- **SPORTS**
  - Awarded **Hostel special mention** for significant contribution in sports                                    [2012]
  - Won **gold** medal in 4x400 m relay race in **Athletics General Championship, IIT Bombay** [2011]
  - Was a part of **gold** winning cricket team in **Fresher's Weekend**                                    [2011]
- **CULTURAL**
  - Made a short film with 10 members which was screened in **Film Festival, IIT Bombay**          [2011]
- **OTHERS**
  - Part of IIT Bombay's National record for most number of people (**937**) simultaneously solving Rubik's cube                                    [2012]
  - Currently designing website of Prof. Eldho T.I (Department of Civil Engineering)                                    [2012]

## OTHER INTERESTS

- Engineering Simulation | Web Designing | Gaming (strategic) | Lawn Tennis | Trekking