



ASHISH KUMAR RAM
CIVIL ENGINEERING
INDIAN INSTITUTE OF TECHNOLOGY, BOMBAY

110040094
B.TECH (2nd year)
D.O.B: 21/08/1993

ACADEMIC RECORD

Examination	Board/University	Institute	Year	CPI/%
Undergraduate	IIT Bombay	IIT Bombay	2011-12	7.86
Intermediate/+2	CBSE Board	J N Vidyalaya Mesra Ranchi	2010	80.4
Matriculation	CBSE Board	J N Vidyalaya Mesra Ranchi	2008	85.2

SCHOLASTIC ACHIEVEMENTS

- Secured an **All India Rank 318** among more than 0.5 million students appearing for **IIT JEE** 2011
- Ranked among **top 3%** students who appeared for **AIEEE** (more than 1 million student) 2011
- Achieved **rank 24** in **JCECB** (state engineering) 2011
- In class 12 secured **95%** marks in chemistry and **85%** marks in PCM 2010
- Awardee of **Dakshana scholarship** from **US** based NGO named **Dakshana foundation** 2008
- Selected for **JNV free schooling** from **6-12** 2003

PROJECTS UNDERTAKEN

Shear Center of a Thin Walled Member

(August 2012)

Guide: Prof Nissar Khan, Department of Civil Engineering

- Study the dependence of shear center and gravity center
- Condition for which shear center and gravity lies in same point
- Find the location of shear center in thin walled member so it does not fail in torsion

Tension and Torsion Test on Mild Steel and Cast Iron

(Sept 2012)

Guide: Prof Nissar Khan, Department of Civil Engineering

- Studied the behavior of cast iron and mild steel under torsion and tension
- Find its weakness whether it fails in tension or in torsion
- Location of plane where maximum tension or torsion may occur and find its failure pattern
- Seen the behavior of both specimen after Proportional limit

Performance Characteristics of PELTON and FRANCIS Turbine

(Sept 2012)

Guide: Prof Balaji Ramakrishnan, Department of Civil Engineering

- Calculated the efficiency of Pelton and Francis turbines and observed its variation with shaft speed
- Measured the rotational speed of the Pelton turbine using the Tachometer arrangement and controlled the inlet pressure by a Bourdan Tube pressure gauge
- Used a transparent hollow Perspex cylinder between the draught bend and the casing for observing the Francis turbine, loaded the turbine using a rope break arrangement
- Calculated the efficiency of pelton and francis turbines and observed its variation with shaft speed

Head losses in pipelines

(Sept 2012)

Guide: Prof Balaji Ramakrishnan, Department of Civil engineering

- Carried a study on frictional losses and losses due to sudden contraction , expansion and bends in pipelines
- Verified the Darcy-Weisbach formula for pipeline friction on a single pipeline system consisting of four pipes of different sizes, supply sump and a manometer
- Calculated the friction factor of four pipes of different sizes and other mentioned head losses over a range of discharges

Shear/Compressive Modulus Test: Laminated Neoprene Pad

(August 2012)

Guide: Prof Nissar Khan, Department of Civil Engineering

- Studied the behavior of Neoprene bearing pads under shear and compressive stress separately
- Operated the UTM(Universal Testing Machine) for calculating modulus of elasticity of bearing pads
- Tested their viability for usage as bearing plates for precast, pre-stressed concrete or steel beams in bridges and buildings by subjecting to similar conditions

Sudoku Solver(C++ project)

(Oct 2011)

Guide: Prof D.B.Phatak, Department of Computer Science

- Applied programing skill of C++ to coded a program for Sudoku Solver (gaming software)
- Enter the present value puzzle in suitable place then it solve the complete puzzle depends on it can be solvable or not
- Approaches are rule based solving, simulated annealing, and sketching for the solution

PID Controller Circuit

(Sept-Oct 2012)

Guide: Prof Siddhartha Dutta Gupta, Department of Electrical Engineering

- Study the different part of circuit i.e. proportional part, integral part and derivative part
- Showing the control of constant temperature according to the desired value (set value) in a closed loop using PID controller circuit
- Controller attempt to minimize the error by adjusting the process control inputs

SOFTWARE SKILLS

- Programing Languages: C++, PHP, HTML, CSS
- Software Packages : **AutoCAD 2010, MATLab**, Silab,Flash,Photoshop, Linux (Ubuntu),MS Office

KEY COURSES UNDERTAKEN

Engineering Mechanics

Solid Mechanics

Fluid Mechanics

Hydraulic Engineering

Computer Programming in C++

Calculus

Linear Algebra

Differential Equations

Structural Mechanics

Data analysis and interpretation