Dinesh Kumar			110040070	
Civil Engineering			UG Third Year (B.Tech.)	
Indian Institute of Technology Bombay			Male	
			DOB: 24.04.1993	

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2014	7.59
Intermediate/+2	C.B.S.E	Jeevan Deep Public School, Nawada	2011	84.00
Matriculation	C.B.S.E	St. Joseph School, Nawada	2009	94.00

INTERNSHIP & TRAININGS

L&T Construction, Engineering Design and Research Center, Mumbai   *(may'13-July'13)*
- Worked on a ongoing four storey residential building project ; Referred structural drawing to Compute Bill of Quantity (BOQ)for tender ship and loading on each member to Perform Stress and buckling analysis and designed as per Indian Standard codes.
- Computed bending moment and torsion manually for reinforcement detailing of beam and verified with Etabs (Design software) result
- Voluntarily Visited construction sites *(The address-Ghatkopar, Crescent bay-parel)* for inspection of rock anchoring and precast technology

Lazy8 Games Pvt. Ltd.   **Mumbai-India**
Technical Trainer in Robotics   *(Dec'12-Jan'13)*
- Conducted a week long practical training session and workshop on robotics for students from different engineering colleges
- Prepared course content and modules comprising of a configurable land robot equipped with IR sensors, microcontrollers and grippers

KEY TECHNICAL PROJECTS

AUVSI Foundation and U.S. Office of Naval Research
International Robosub Competition ,San Diego, California   *(May'12-Present)*
Designing and developing an unmanned autonomous underwater vehicle (AUV) that localizes itself and performs realistic missions based on feedback from visual, inertial, acoustic and depth sensors using thrusters and pneumatic actuator.
Guide: Prof. Dr. Hemendra Arya and Prof. Dr. Leena Vachhani
- Member of mechanical sub division of a 22 membered 4 tier team constructing a state of the art AUV at an annual budget of 2.1 million INR
- Designed the mechanical sub system of AUV comprising of custom made main pressure vessel and external enclosures
- Designed and modelled using CAD software aided with simulation check; performed detailed Finite Element Analysis of the assembly and components to ensure reliability of structure
- Secured 10th position out of 32 teams from universities all over the world

KEY ACADEMICS PROJECTS

Experimental Investigation On High Strength Concrete   **IIT Bombay, Mumbai**
Guide: Prof. Prakash Nathagopalan   *(May'13-current)*
- Developing self compacting high performance concrete with comparative studies of its properties for optimisation of paste composition, a concept based on particle packing and rheology
- Casted concrete blocks with one set of composition and tested under compressive testing machine(CTM)

MAFIA GAME: CS 101 Course Project

Guide: Prof. D. B. Phatak *(Oct'11-Nov'11)*

Designed and implemented the game Mafia in C++ using EZ windows package to provide a friendly Graphical User Interface (GUI).

SEVEN SEGMENT DISPLAY: EE 101 Course project

Guide: Prof. Siddhartha Duttagupta *(July'12-Aug'12)*

Made an electronic display device for displaying decimal numerals by using seven segment decoder (MC14511) and Can be used as an alternative to the complicated Dot Matrix Display.

RELATED COURSES UNDERTAKEN

Civil Engineering : Design of Structures, Soil Mechanics, Structural Mechanics, Solid Mechanics, Surveying, Hydraulics Engineering and Fluid Mechanics

Computer Science and Electronics Courses: Computer Programming and Utilization, Analog and Digital Electronics, Introduction to Electrical and Electronics Circuits

SKILLS

Designing Software: Etabs, SolidWorks, ANSYS Fluent, LabVIEW
Programming Language: C++

POSITIONS OF RESPONSIBILITY

Technical Activities Secretary, Hostel 13 *(Aug'12-April'13)*

Organised and conducted various workshops (LT Spice, Solid Work) on Robotics and Embedded system in the hostel for **Inter Hostel General Championship Event.**

Technical Mentor

Responsible for mentoring freshmen, ensuring their smooth transition to technical activity.

EXTRA- CURRICULAR ACTIVITIES

- Awarded **Hostel Technical Special Mention** for "Outstanding performance in Technical Activities" during the year 2012-13
- Part of the **winning team** for CRICMANIA -IIT Bombay's cricket league
- Successfully completed **National Cadet Corps** "B" certificate training
- Secured 1st position in Tug of War General Championship Competition
- Secured 3rd position in School Debate Competition