Curriculum Vitae

YOGRAJ PATEL
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Fourth Year, Dual Degree Programme
Mechanical Engineering
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OBJECTIVE

Build a strong foundation of scientific knowledge of which I am in the process of acquiring and to apply and pursue it successfully in my research during internship under your able guidance.

EDUCATION

DEGREE	INSTITUTE	YEAR	CGPA/PERCENTAGE
B.Tech (Mechanical Engineering) M.Tech (CAD and Automation)	Indian Institute of Technology, Bombay	2013	6.61/10 (After 6 Semesters)
Intermediate/10+2	Madhya Pradesh State Board of Secondary Education	2008	87.33%
Matriculation	Madhya Pradesh State Board of Secondary Education	2006	86.40%

ACADEMIC ACHIEVEMENTS

- Secured **All India Rank 1419** in **IIT-JEE 2008**.
- Ranked **181** (state) and **2777** (All India) in All India Engineering Entrance Examination **(AIEEE) – 2008.**
- Ranked **First in School** in GK competition organised by Lion's Club Bhopal for consecutively two years (1999, 2000).

INDUSTRIAL EXPERIENCE

- **Designing of Petroleum storage tanks conforming to API 650 standard**
  (Reliance Industries Ltd, Dahej Manufacturing Division/Guide: Mr. G K Choudhury / May-June 2011)

  - Analysed the basic fundamentals of mechanical engineering used in designing, fabrication and testing of storage tanks conforming to API 650 standards.
  - Developed an object oriented C++ program that can facilitate this highly iterative and tedious design calculations.

- **Centrifugal Fan performance testing**
  (Crompton Greaves, Manufacturing Division, Bhopal/ Guide: Mr. Parag Saxena / December 2010)

  - Worked at the R&D department on evaluation of centrifugal fan performance with the help of CAD modelling and simulation. The performance criterions to be measured were flow rate and static pressure at a given RPM.

ACADEMIC PROJECTS

- **Simulation of metal casting process**
  (Guide: Prof. B Ravi / Autumn 2011)
  - ➤ Analyzed the impact of hot spot on quality of metal casting. Used simulation software AutoCast to design the sand mold and mold accessories like feeders, gates.

- **Experimental Characterization of orthogonal machining of Pyrolytic Carbon (PyC)**
  (Guide: Prof. R K Singh / Autumn 2010)
  - ➤ Evaluated the effects of various cutting parameters on cutting forces and 3D average surface roughness (acquired by white light interferometer) of PyC via an experimental design.

- **Material Selection for Automobile Parts** *(Guide: Prof. G V Prabugaonkar / Autumn 2009)*
  - ➤ Studied the current types of automotive parts, the criterion and subsequent consequences of material selection in the same.
  - ➤ Extensively studied the properties needed for components to ensure durability.

- **C++ program for Library Management System** *(Guide: Prof. Abhiram Ranade / Autumn 2008)*
  - ➤ The Interface had all major functions like book search catalogue, issuing and returning details, automatically impose fines on defaulters, add new users and books.
  - ➤ Used Object Oriented Programming by creating different class of users. Class structure could distinguish between various Categories of users and function accordingly.

EXTRA CURRICULAR ACTIVITIES

- Undertaking a **Japanese language course**.

- Designing and Publicity Co-Ordinator Techfest 2010.
  - ➤ Designed advertisements which were published in Leading Magazines & Newspapers of India.
  - ➤ Designed posters which were sent to Thailand, Australia, Sri Lanka and also to many engineering colleges all over India for publicity.

- Made a line following robot *(Spring 2009)*
  - ➤ Used I.C.'s 7805 and L293D to step up and step down voltage and control speed.
  - ➤ Used LED's and sensors to distinguish between black and white surfaces.

- Member of SAE (Student Automotive Engineering) **Formula1 team of IIT Bombay** (2008-09)
  - ➤ Worked on Feasibility of Turbocharger and Supercharger for the car.

- Cadet of National Cadet Corps (NCC); also participated in its annual training camp (2008-09).

- Awarded **Second Rank in Bhopal** in the 'My Dream Career Painting Competition' organised by Birla Sun Life Insurance (2004).

COMPUTER SKILLS

- **CAD Software**: SolidWorks, AutoCAD, Siemens Nx
- **Other Software**: Matlab, Microsoft Office, Adobe Photoshop.
- **Programming Languages**: C/C++

RELEVANT COURSES UNDERTAKEN

- **Mechanical Engineering**

  - ➢ Strength of Materials, Fluid Mechanics, Applied Thermodynamics, Advance Manufacturing Processes, Design for Manufacturing, Industrial Engineering & Operations Research, Introduction to Optimization, Identification & Modelling of Dynamic Systems, Kinematics & Dynamics of Machines.

  - ➢ **Labs**: Applied Thermodynamics lab, Mechatronics Lab, Heat Transfer & Metrology Lab, Fluid Mechanics Lab, Kinematics & Dynamics of Machines Lab, Solid Mechanics Lab, Manufacturing Processes Lab.

- **Other courses: -** Engineering Metallurgy, Economics, Introduction to Renewable Energy Technologies, Environmental Studies, Reading Literature.

PERSONAL DETAILS

Gender: Male
Date of Birth: 04/08/1991
Hobbies: Photography, Editing/Designing on Photoshop, Bloging, Reading Novels, Gardening.
Permanent Address: H-39, Essarjee Campus, BDA Road,
                 Barkhera Pathani, BHEL
                 Bhopal - 462 023, Madhya Pradesh, India.

UNDERTAKING

I, Yograj Patel, hereby declare that particulars given herein are true to the best of my knowledge.
References available on demand.