



Divyanshu Singh
Metallurgical Engineering and Materials Science
Indian Institute of Technology, Bombay

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B.Tech.
Male
DOB: 12/09/1990

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2012	7.62
Intermediate/+2	CBSE	Central Academy	2007	85.00
Matriculation	CBSE	St. Paul's School	2005	92.00

RESEARCH EXPERIENCES

SEMINARS

Manufacturing Process – Incandescent Bulb (Aug-Nov 2011)

- Analysed the components (filament, glass, contact wires); studying the material and its applicability
- Studied filament and glass manufacturing processes such as wire drawing and glass blowing

Ni-Ti based Shape Memory Alloys and its Medical Applications (Jan – Apr 2011)

- Studied shape memory effect, martensitic transformation and superelasticity in Nitinol (Ni-Ti alloy)
- Studied Nitinol's suitability for applications in minimum invasive surgical techniques like inferior vena cava filter, intravascular stents and for application in orthopaedics

KEY ACADEMIC PROJECTS

Project Title	Description
Dental Implants (Aug- Sept 2010)	<ul style="list-style-type: none">• Identified traits required of a material to function as dental implant e.g. high compressive strength, fracture toughness, aesthetics, biocompatibility• Studied the applicability of Zirconia-alumina composites for use as implants and slip casting as the pertinent process
Structural Aspects of Burj-al-Arab (iconic hotel at Dubai) (Sept-Oct 2009)	<ul style="list-style-type: none">• Keyed out its major structural components like steel exoskeleton, tuned mass dampers, atrium wall, artificial island• Studied the major engineering challenges involved in construction of artificial island, deployment of tuned mass dampers to dissipate vortex shedding and special coatings (epoxy micaceous iron oxide) to overcome the effects of a corrosive environment
Material Aspects of Mechanical Mouse (Jan-Mar 2009)	<ul style="list-style-type: none">• Isolated the different components, in a team of 8, to outline the material, process of manufacture and properties making them relevant for the specific application• Worked in specific on the Integrated circuit, broadly studying the chip manufacturing processes and its packaging.
Philosophy of Objectivism (Aug-Oct 2009)	<ul style="list-style-type: none">• Sifted through Ayn Rand's writings (both fiction and non-fiction) to understand the metaphysical, epistemological, ethical and political elements of the philosophy• Summarised the findings to structure the philosophy and delivered a presentation on the same
Sudoku Solver (Aug-Nov 2008)	<ul style="list-style-type: none">• Developed the algorithm and software in C++ to solve intermediate level Sudoku puzzles

POSITION OF RESPONSIBILITY

Co-ordinator, Mood Indigo 2009

- Managed the execution, logistics and publicity for an event 'Kick up a Stomp' as Co-ordinator at Mood Indigo 2009 (IIT Bombay's cultural festival)

COMPUTER SKILLS

- Languages- C, C++, MATLAB.
- Software and Operating System – MS Office, Windows XP/7

EXTRACURRICULARS AND HOBBIES

- Participated in Techfest 2011, as part of a 3 member team, to build a 4 legged robot that navigates using Hydraulic mechanism
 - Hobbies include table tennis and playing synthesizer
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In my leisure, I enjoy reading, writing and cinema.

Reading fiction and cinema, though both started as pastimes, gradually piqued a more academic interest in me and I started spending more time deconstructing the various elements of storytelling. In fiction, I read notable works of authors like Anita Desai, Kiran Desai, Aravind Adiga, Arundhati Roy besides those of other acclaimed writers, the likes of Milan Kundera, Ruskin Bond, Ayn Rand, Oscar Wilde, Ernest Hemingway etc

Gradually I also developed an inclination for **philosophical works**, owing primarily to the course Philosophy of Life, following which I have read essays by Sartre, J.S Mill, Aldous Huxley, Bertrand Russell- on topics discussing the intangible facets of life much sidelined from mainstream discussions e.g. extent of individual liberty and state authority, existentialism, in praise of idleness etc

Reading such works further sparked in me, an interest to write which, beginning with diary entries for practice, has now culminated into **writing a blog**, now live for a year, encompassing **essays** and **flash fiction**.

In cinema I have watched in particular the works of Woody Allen, besides a number of other movies in the drama genre, both in English and other foreign languages.
