



Nooruddin Kapadia
Chemical Engineering
Indian Institute of Technology Bombay
Specialization: None

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UG Third Year (B.Tech.)
Male
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Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2014	8.29
Intermediate/+2	CBSE	Kalidas Montessori	2011	90.60
Matriculation	CBSE	Kalidas Montessori	2009	83.60

KEY TECHNICAL PROJECTS

ChemECar

[Jan'12-Mar'12]

National-level competition with an aim of designing a shoe sized car considering environmental and safety aspects that must derive its power and braking mechanism from an on board chemical reaction

- Designed an environmental friendly car which runs by exhausting compressed water because of the **pressurised CO₂** produced through the on-going **chemical reaction of Vinegar and baking soda**
- Engineered the **two compartment based car** to obtain the maximum pressure with limited usage of chemicals
- Simulated and optimised in Matlab** to reduce the cost and size of the car
- Was the **only car from the institute** that completed the problem statement

Non-Contact Emissivity and Thermometry

[Nov'12-Jul'13]

- Built a device for determining temperature of a body without direct contact using thermal and IR sensors
- Analysed the available non-contact thermometer and **implemented the emissivity factor** into account for the grey body resulting in increased accuracy and reliability
- Presented the device at *TECHFEST 2013* along with **80 eminent projects** from all over the world
- Receiving market demands** from companies to commercialise the product

BlindSight - Technovation, IIT Bombay

[Apr'13-Present]

Equipment that helps blind persons to navigate freely on the road by getting proper directions and alerts

- Built a device that can fit over shins, waist and hands of a person to alert him of any walls, depression or any obstacle either static or moving come along its pathway
- Developed an intelligent circuit comprising of Ultrasonic sensors and phasors using **AVR programming**
- Currently working on **incorporating GPS navigation** to provide proper directions
- Selected to **showcase in Technical Orientation 2013** for freshmen as one of the 5 best projects

Design Exploration Workshop (DEW), Innovation Cell, IIT Bombay

[Dec'11]

DEW engages students across all disciplines in ideation, design and implementation of prototypes

- Built a **Fire Escape Elevators for Sky Scrapers** under the theme **Personal Emergency Habitats**
- Developed a **space-efficient prototype** used to save people during fire emergencies in tall buildings
- Received appreciation from faculties of various disciplines for its uniqueness

Wall Painting Robot

[May'12-Jun'12]

Institute Technical Summer Project (ITSP-2012), Robotics Club, IIT Bombay

- Developed a robot which can autonomously paint an entire wall with reference to some origin
- Used **rack and pinion mechanics and Arduino programming** to automate the painting process
- Implemented a **power-efficient mechanical method** to perform the task more economically

PAPER CARDBOARD BOT

[Feb'12-Mar'12]

- Engineered a **chariot using only cardboard and paper** which can sustain **at least 80kg weight**
- One of **only 3 teams** which were able to complete the above task in the event *Technoholi*

PRACTICAL TRAINING

Neev Knowledge Management: Summer Internship [May'13-Jun'13]

- Implemented **Search Engine Optimisation based oriented online marketing** for the company
- Studied concepts of **finance** and promoted the content to developing team of CFA and FRM
- Built a **proper sitemap** of the company website based on the **human psychology**; introduced the **linked blog system** which helped enhance the Google rank of the site

Rashtriya Chemical and Fertilizers, Mumbai [Jan'12]

Guide – Prof. Sanjay Mahajani

- Successfully completed a training program on “Production of Sulphuric Acid” at RCF, Mumbai
- Developed an insight in applying theories of Chemical Engineering in a real plant

Lazy8games: Winter Internship [Dec'12]

- Designed a **professional company website** and an **Android Application** for arithmetic calculations
- Conducted sessions on **Web Designing and Robotics** for freshmen and developed the content for the same

SCHOLASTIC ACHIEVEMENTS

- Recipient of **Institute Merit-Cum-Means Scholarship** given by the Government of India
- Pursuing minor in Energy Science and Engineering
- **Distinction** in Online **Inbound Marketing** Institute Examination
- **A perfect 10 grade in:** Numerical Analysis, Economics, Chemical Engineering lab1
- All India Rank **823** and **district rank 1** in **IITJEE 2011** among 4,85,000 candidates
- All India Rank **485** and **district rank 1** in **AIEEE 2011** among 12,00,000 candidates
- Ranked among the **top 1%** in the *Indian Association of Physics Teachers Olympiad* in class 12th

POSITION OF RESPONSIBILITIES

Manager - Competitions, AZeotropy [Mar'13-Present]

Chemical Engineering Department festival of IIT Bombay

- In charge for developing and executing the competitions and overall management of the festival
- Took the initiative of having department people participation in international competition *ChemECar* and thus having full execution responsibilities including funds, team management and liaison with the professors

Mentor Avanti Fellows: A non-profit organisation whose aim is to mentor and guide capable but financially weak students for clearing Engineering Entrance Examinations [Jan'12 – Dec'12]

Core Team Member - Peer to Peer Stude club, IIT Bombay: [Jul'12-Apr'13]

- Conceptualised and conducted workshops on “*Seven Habits of Highly Effective People*”
- Organised informal *Student Teacher Connect sessions* to have talks on any technical activities

COMPUTER SKILLS

- Programming: C++, R, Arduino, AVR programming
- Web language: HTML, CSS, PHP, Javascript, JQuery, SQL, RSS, XML
- Packages : LabView, Matlab, Scilab, Latex, EasyScope, Microsoft Visio Professional 2013
- Completed Diploma in Computer Application (**DCA**) and Desktop-publishing (**DTP**)

EXTRA CURRICULAR ACTIVITIES

- Awarded **Special Mention** for overwhelming contribution in hostel technical activities
- Organized group discussions independently in different hostels to cater the need of communication skills in students and represented hostel for debating in Institute freshmen competition *Freshiezza*
- Currently learning Japanese Language; Scripts known: Latin, Persian, Devanagari

SPORTS

- Swam continuously for 6 hours covering distance of 7 km at *Swimathon 2012*
- Completed **B certificate** *National Cadet Corps (NCC) training* in 2011-2012
- Successfully completed the **table-tennis camp** under a professional teacher in summers of 2012
- Yellow belt holder in Judo; Completed 6.02 km Institute running crossy