



Niklesh Lalwani
Electrical Engineering
Indian Institute of Technology Bombay
Specialization: Communication & Signal Processing

12D070029
UG Second Year
Male
DOB: 14/05/1994

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2014	8.26
Intermediate/+2	CBSE	DAV Public School,Kota	2012	92.40
Matriculation	CBSE	St Pauls School, Mala road , Kota	2010	9.60

Scholastic Achievements

- Secured All India Rank **287** out of 5,00,000 students in Joint Entrance Exam '12
- Secured All India Rank **488** out of 11,00,000 students in All India Engineering Entrance Exam '12
- National Talent Search Examination Scholar' 08; given to 500 students from the country.
- Among the top **1%** students in the country selected to appear for Indian National Chemistry Olympiad' 12
- Secured All India Rank **12** in National Level Science Talent Search Examination '10 conducted by Unified Council
- Secured International Rank **85** in International Mathematics Olympiad '11 conducted by Science Olympiad Foundation
- Secured All India Rank **210** in National Science Olympiad '09 conducted by Science Olympiad Foundation

Key Projects

- Home Automation** [May '13-Jun '13]
Institute Technical Summer Project
 - Developed an android application and the relevant hardware to control the AC switches at home (light, fan etc) using the application
 - Bluetooth module was used to receive signals from phone
 - Arduino was coded to toggle digital output which was then passed through a relay to give AC output.
- Motion Capture using Webcam** [Nov '13]
Done under ID-408 course project (Guide- Prof. Sumant Rao)
Programmed in MATLAB; it involves
 - detecting and tracking moving objects ; and
 - detecting motion of a single colour, i.e.; red, blue or green using a webcam.
- CS101 Course Projects** (Guide- Prof. Sridhar Iyer)
 - Crazy Drive-Game** [Feb '13]
Developed a basic car game using Scratch in which the player has to dodge the incoming traffic.
 - Shortest Route Finder** [Mar '13]
Implemented in C++, user has to input a map(coordinates and/or distances) and the program gives you the shortest route between any 2 points in the map
- Line Follower Bot** [Sept '12]
Built a line following bot using Arduino microcontroller for line follower competition organised by Student Technical Activities Body, IIT Bombay
- Wireless remote controlled car** [Aug '12]
Developed a basic wireless remote controlled car at XLR8 organised by Student Technical Activities Body, IIT Bombay

Technical Skills

- **Programming Languages-** C/C++, MATLAB, Eagle, NG Spice, Verilog HDL
 - **Software packages-** Sony Vegas Pro, Adobe After Effects , Adobe Photoshop, AutoCAD
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Positions of Responsibility

- **Convener, IIT Bombay Broadcasting Channel** **[Apr '13- Present]**
 - It is the online video channel of IIT-Bombay aimed at giving the viewers a sneak peak into the events, activities and life at IIT-Bombay.
 - Other than Cultural, Sports and Academic Updates, we also work on videos aimed at creating awareness about various social causes in and around the college.
 - **Film & Media Secretary, Hostel 2** **[Apr '13-Present]**

Responsible for Film and Media department of a hostel of about 450 students, conducting intra-hostel film events, workshops, and representing the hostel in the Film General Championship, aimed at improving the film culture in the hostel
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Extra Curricular Achievements

Cultural

- Winning team at Performing Arts Festival '13, IIT Bombay in film & dance genre
- 1st position in Trailer making competition '13 || 1st position in 48 hour film making competition' 13 || 2nd position in Music video making competition at Freshizza '12
- Best Editor, Best Cinematographer at Sophie Films '13

Sports

- Runner-up team at Institute Football League '13
 - Completed a year long course in Football under National Sports Organisation **[Jul '12-Apr'13]**
at IIT Bombay
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Relevant Courses

- Pursuing a minor in **Industrial Design** from IDC, IIT Bombay.
- **Electrical Engineering:** Network Theory, Electronic Devices and Circuits, *Signals and Systems, *Analog Circuits, *Digital Systems, *Electrical Machines and Power Electronics, *Biosensors and BioMEMS.
- **Mathematics and Statistics:** Calculus, Linear Algebra, Differential Equations, Complex Analysis Data Analysis and Interpretation

(* denotes ongoing courses)