

Unnishankar Jayaprakash Mechanical Engineering Indian Institute of Technology Bombay Specialization: B Tech

150100015 UG Second Year

Male

DOB: 10/01/1997

| Examination     | University | Institute                          | Year | CPI / % |
|-----------------|------------|------------------------------------|------|---------|
| Graduation      | IIT Bombay | IIT Bombay                         | 2017 | 8.32    |
| Intermediate/+2 | HSC        | PACE Junior Science College, Thane | 2015 | 94.00   |
| Matriculation   | ICSE       | St. Gregorios High School          | 2013 | 95.33   |

## SCHOLASTIC ACHIEVEMENTS

| • Secured All India Bank 454 (100 0.1 Dercent) in JEE Advanced among 1.5 takin students — 120 | lents $(2015)$ | All India Rank 434 (Tor | Secured All India Rank 434 (Top 0.1 per | ercent) in JEE Advanced among 1.5 lakh students | ong 1.5 lakh students (2 |
|---|----------------|-------------------------|---|---|--------------------------|
|---|----------------|-------------------------|---|---|--------------------------|

• Achieved All India Rank 306(Top 0.02 percent) in JEE Main among 15 lakh students (2015)

• Scored **382/450** marks in **BIT-SAT 2015** (2015)

• AA grade in Engineering Graphics and Drawing (stood 11th out of 450 students) (2015)

• Awarded INSPIRE award for being in the top 1 percent of HSC Board Examination, Maharashtra (2015)

• Currently pursuing a Minor degree in Humanities and Social Sciences, IIT Bombay (present)

## KEY PROJECTS UNDERTAKEN

# Quadcopter (Hobby Project)

Aeromodelling Club, IIT Bombay

(Spring, 2015-16)

- Designed and built a functional quadcopter and it's components, working in a team of 5.
- Successfully manouvered the quadcopter using a wireless bluetooth module upto a height of 20 metres

Line Follower (Spring, 2015-16)

Student Technical Activities Body, IIT Bombay

- $\bullet \ \ Designed \ and \ created \ an \ {\bf autonomous \ sensor \ controlled \ bot} \ \ which \ follows \ a \ white \ line \ on \ a \ black \ surface$
- Coded in AVR (ATMEGA-16) micro controller and used Infrared (IR) Sensors to manufacture the bot

#### Checkers Game (Course Project)

Guide: Prof. Varsha Apte

(Autumn, 2015-16) CSE, IIT Bombay

- Developed a Checkers Game in C++ using TurtleSim Graphics package
- Implemented an Artificial Intelligence (AI) in the game increasing it's efficiency to 100 percent and created a user friendly graphical interface with two game modes

#### COURSES UNDERTAKEN

| CORE COURSES                      | MATHS AND PHYSICS                 | OTHER DEPARTMENTS                     |
|-----------------------------------|-----------------------------------|---------------------------------------|
| -Engineering Graphics and Design  | -Quantum Physics and applications | -Introduction to Biosciences          |
| -Engineering Mechanics            | -Calculus                         | -Introduction to Programming          |
| -Data Analysis and Interpretation | -Linear Algebra -Economics*       |                                       |
| -Thermodynamics*                  | -Differential Equations           | -Engineering Metallurgy*              |
| -Solid Mechanics*                 | -Electricity and Magnetism        | -Approaches to Literaturers*          |
| -Fluid Mechanics*                 |                                   | -Introduction to Electrical and Elec- |
|                                   |                                   | tronic Circuits*                      |

Ongoing courses marked with \*

# POSITIONS OF RESPONSIBILITY

# Convener | Roots-Classical and Folk Arts Club

(April 2016- present)

Institute Cultural Council, IIT Bombay

- Managing an overall budget of INR 0.6 million, working in a 5-member team
- Conceptualizing and executing 30+ events throughout the year to cater to 10K+ students and faculties
- Organizing professional concerts and workshops with SPICMACAY under the banner of Virasat
- Handling semester long vocals, flute and kathak workshops for 100+ students
- Promoting various forms of classical and folk art activities in the institute

### Coordinator-Competitions | Mood Indigo, IIT Bombay

(May 2016- present)

Asias largest college cultural festival; 131,000 footfall with 220+ events

- Conceptualized and organized 6 Multicity Competitions pan India thus increasing outreach
- Functioned as the first Point of Contact for the cultural heads of various colleges
- Leading a team of 20 organizers and allotting them relevant work related to planning and publicity
- Negotiated deals with cultural institutes to provide the winners a platform to showcase their talent

## TECHNICAL SKILLS

• Programming Languages C, C++, Python

• Software Packages LATEX, SolidWorks, AutoCAD, MATLAB, Adobe Premiere Pro, PSpice

• Operating systems Windows, Mac OS, Ubuntu

## EXTRA-CURRICULAR ACTIVITIES

#### Achievements

• Awarded the first place in IIT Bombay's Freshmen Band Competition - Freshiezza (September 2015)

• Secured third place in IIT Bombay's Music General Championship - Goonj (February 2016)

#### Music

- Professionally trained in Carnatic Classical Vocals under *Smt. Jaya Subrahmaniyan* for **9 years** and in playing Carnatic violin under *Shri N. Shrikant* for **7 years** through the Fine Arts Society
- Performing regularly in **Institute events** like Surbahaar, Swarsandhya, Institute Classical and Folk Arts Night, Club and Music Orientations and competitions

#### Miscellaneous

- Part of the **contingent of 12 students** selected from India to attend the renowned **Seeds of Peace**International Camp in Maine, USA

  (June 2012)
- Recipient of the prestigious **Hindustan Times Scholarship** along with 49 others selected from over 50,000 students all over Maharashtra (2010-11)
- Served as the **Head Boy** in school, leading a student council of **20**+ members (2012-13)
- Pursued **French** language for 2 years in school (2011-2013)