

Sankalp Gaur Engineering Physics Indian Institute of Technology Bombay

150070017 UG Second Year Male

DOB: 29-06-1997

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2017	9.49
Intermediate/+2	D.A.V. Public School, Pune	D.A.V. Public School, Pune	2015	97.80
Matriculation	D.A.V. Public School, Pune	D.A.V. Public School, Pune	2013	98.40

ACADEMIC ACHIEVEMENTS

- All India Rank 1 in JEE MAINS 2015
- All India Rank 56 in JEE ADVANCED 2015
- **AP grade** for outstanding performance in PH 107 (Quantum Physics and Application) and CS 101 (Computer Programming and Utilization)
- All India Rank 2 in KVPY exam conducted by Department of Science and Technology, Govt. of India, 2014
- Qualified for Orientation cum Selection Camp (OCSC) for International Physics Olympiad (IPhO) 2015
- All India Rank 2 in National Entrance Screening Test (NEST) 2015
- All India Rank 3 in National Standard Examination of Chemistry (NSEC) 2014
- All India Rank 3 in National Science Talent Search Examination (NSTSE) 2013
- Awarded NTSE Scholarship by NCERT, 2011
- Secured National Rank 7 in International Maths Olympiad (IMO) and National Rank 8 in National Science Olympiad (NSO), conducted by SOF in 2015

PROJECTS

Radio Telescope

Radio Interferometry and Astronomy Project (Institute Technical Project) (ongoing)

- Constructing a **basic interferometer** using parabolic reflectors and available satellite equipment along with a data processor
- Using analog circuits and micro-controllers for **digital signal processing** of the output of the antennas
- Implementing a **positioning and feedback** system for setting the azimuthal and polar angles of the satellite antennas accurately

Meme Dynamics

Non-linear Dynamics Course Project under Prof. Amitabha Nandi (ongoing)

• Project to study the **spread of memes** in internet culture and make an appropriate mathematical model for it using non-linear dynamics

 Keeping track of categories of memes and susceptibility of people towards memes, draw inferences and relate them to the prominent SIR model (Susceptible, Infected, Recovered)

Computer Games

Class XII School Project

- Made a single player Cows and Bulls game similar to mastermind
- Made a game where player is supposed to select matching images from an initially unknown grid of images (like the classic picture games)

COURSES COMPLETED AT IITB

- General: Multivariable Calculus, Organic-Inorganic-Physical Chemistry, Quantum Physics and Application, Linear Algebra, Ordinary Differential Equations, Basics of Electricity and Magnetism, Computer Programming and Utilization, Economics, Complex Analysis, Partial Differential Equations
- Engineering Physics: Classical Mechanics, Data Analysis and Interpretation, Introduction to Special Theory of Relativity, Thermal Physics, Non-Linear Dynamics
- Electrical: Introduction to Electrical Systems, Introduction to Electronics, Signals and Systems

CODING SKILLS

• Intermediate: C++, Java, Python

• Beginner: HTML, MATLAB, LaTex, Arduino, AVR

EXTRA-CURRICULAR ACTIVITIES

- Stood 1st, all over India, in **Tata Power and Energy Club** Quiz 2010
- Won Energise, the quiz conducted by Energy Club, IIT Bombay, 2016
- Team obtained 4th position in Logic GC 2015 among more than 500 participants of IITB
- Participated in XLR8 and Line Follower Competitions at IITB
- Good at computer games; reached World Rank 2 on gaming site agame.com