



## ACADEMIC QUALIFICATIONS

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|---|---|
| <b>Indian Institute of Technology, Kharagpur</b><br><i>Electronics and Electrical Communication Engineering (B.Tech+M.Tech)</i><br>CGPA: 8.01 | Kharagpur, West Bengal<br>2012-2017(Expected) |
| <b>Jawahar Navodaya Vidyalaya</b><br><i>Higher Secondary – CBSE AISSCE</i><br>Score: 94.4 %   | Wardha, Maharashtra<br>2011                   |
| <b>Jawahar Navodaya Vidyalaya</b><br><i>Secondary – CBSE AISSE</i><br>Score: 90.4 %   | Wardha, Maharashtra<br>2009                   |

## SCHOLASTIC ACHIEVEMENTS

- Cleared **Joint Entrance Examination** conducted by Indian Institute of Technology with 99.16 percentile. (2012)
- Solely designed and Exhibited a mathematics project named 'COMPLEX GEO\_TRIGONOMETER' at several stages followed by prestigious **Jawaharlal Nehru National Science Exhibition for Children, Jaipur** and finally at **98<sup>th</sup> Indian Science Congress, Chennai**. (2011)
- **Regional Topper** in Class XII Board (CBSE) from Pune Region. (2011)
- Among top 400 students who qualified for **Indian National Mathematics Olympiad – 2010**. (2010)
- Awarded Meritorious Scholarship in Maharashtra Talent Search Examination, 2009. (2009)
- Among top 10% scorers in **XL National Mathematics Talent Competition 2008** conducted by 'The Association of Mathematics Teachers of India'. (2008)
- Ranked 1261 at Round 1 of **Facebook Hacker Cup 2015**. (2015)

## WORK EXPERIENCE

- Gray Routes Innovative Distributions, Mumbai** (May 2015 – July 2015)
- Summer Intern – Product Analyst
    - Worked on Google BigQuery, Query Optimization and added backend functionalities to the existing application.
    - Functionalities included using google maps API and the direction service for planning optimized journey via some outlets to the destination with option for manually prioritizing some outlets.

## PROJECTS

- Interactive Construction of 3D Models from Panoramic Mosaics** (May 2014 – present)
- Summer Project under Prof. P. K. Biswas, IIT Kharagpur
    - The System uses a set of images taken from a same view point and their transformation matrices as input.
    - It recovers the camera pose for each mosaic from known line directions and points, and then constructs a 3D model using all available geometrical constraints. The problem is formulated as a least square problem by partitioning the constraints as hard and soft, which can be solved using QR factorization.

## Lane Follower Bot

(Dec 2013)

- Project at Robotix workshop, TSG, IIT Kharagpur
  - The bot used a camera feed as input and with an Arduino board the feed is processed using computer vision algorithm to guide the bot through the lane.

## Complex Geo-Trigonometer

(May – Sept 2010)

- College level project under Mr. Kawade, JNV Wardha.
  - A college level project which implements many mathematical concepts of former level in a practical way. It gives a best tool to find trigonometric function values of all possible angles and also the inverse of all invertible functions.
  - The Project received appreciation at National level as well as it was personally appreciated by Dr. Thomas Steitz (Nobel laureate Chemistry).

## TECHNICAL SKILLS

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|-------------------------|--|
| • Programming languages | C, C++, PHP, Javascript, Python ( Basics )         |
| • Libraries and API's   | OpenCV, Google Maps, DirectX (Basics )             |
| • Software frameworks   | Visual Studio, MatLab, SolidWorks, Adobe PhotoShop |
| • DBMS                  | SQL, Google BigQuery                               |

## RELEVANT COURSES UNDERTAKEN/ONGOING

- |  |  |
|--|--|
| • Digital Image Processing               | • Programming and Data Structure*                              |
| • Speech and Natural Language Processing | • Machine Intelligence and Expert Systems                      |
| • Digital Signal Processing*             | • Microcontrollers and Embedded Systems*                       |
| • Digital Communications*                | • Matrix Algebra   |
| • Control Systems Engineering            | • Probability and Stochastic Processes                         |
| • Mathematics I & II                     | • Signals and Systems  |
| • Algorithms I & II <sup>#</sup>         | • Digital Electronic Circuits* <sup>#courses on coursera</sup> |
- \*courses with lab component

## SPORT PROGRAMMING

- Codechef : Highest Rank 282 (*world*)
- Codeforces : Highest Rating 1641

## POSITION OF RESPONSIBILITY AND EXTRA CURRICULAR ACTIVITIES

- Part of Silver winning Case Study Event, Technology Students Gymkhana, IIT Kharagpur. (Mar 2014)
- **Subhead, National Students Space Challenge'13 (nssc.in)** (Sept 2013)  
Involved coordinating a team of 24 peoples in the design team of the first space fest organized by spAts, IIT Kharagpur.
- Member of Gold Winning **Inter-Hall Rangoli** Competition in a team of 5. (Oct 2013)
- Awarded 'C' and 'B' Certificate in National Cadet Corps (1 Bengal EME Coy NCC). (2012-2013)
- Member of Bronze Winning **Inter-Hall Illumination** Competition. (Oct 2012)
- Playing Team Member Azad Hall Hockey Team, IIT Kharagpur.
- Awarded B grade in Intermediate Grade Drawing Examination conducted by Govt. of Maharashtra. (2006)