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ASHISH H MANMODE

12EC30005

Objective: Seeking internship in a fast growing organization so as to hone my technical skills and attaining excellent standards while meeting organizational needs.

ACADEMIC QUALIFICATIONS

Year	Degree/Certificate	Institute/School	CGPA / %
2012 – Present	5th semester, Electronics and Electrical Communication Engineering, Dual Degree	Indian Institute of Technology, Kharagpur	7.62
2011	Class XII Board (CBSE)	Jawahar Navodaya Vidyalaya, Wardha (MH)	94.4
2009	Class X Board (CBSE)	Jawahar Navodaya Vidyalaya, Wardha (MH)	90.4

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 **98th 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)

TECHNICAL SKILLS

- Programming languages — C, C++, Python (Basics)
- Libraries — OpenCV, DirectX (Basics)
- Software — Visual Studio, MatLab, SolidWorks, Adobe PhotoShop

RELEVANT COURSES UNDERTAKEN/ONGOING

- Network Theory*
- Analog Electronic Circuits*
- Analog Communications*
- Control Systems Engineering
- Mathematics I & II
- Programming and Data Structure*
- Matrix Algebra
- Probability and Stochastic Processes
- Signals and Systems
- Digital Electronic Circuits*

*courses with lab component.

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)

- Collage level project under Mr. Kawade, JNV Wardha.
  - A collage 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).

POSITION OF RESPONCIBILITY AND EXTRA CURICCULAR 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)