E-424

Azad Hall, IIT Kharagpur

**ASHISH H MANMODE**

West Bengal, India. 721302

+91 7585 965862

[ash.manmode@iitkgp.ac.in](mailto:ash.manmode@iitkgp.ac.in)

**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 / %**

5th semester,

2012 – Present Electronics and Electrical Communication Indian Institute of Technology, Kharagpur 7.62

Engineering, Dual Degree

2011 Class XII Board (CBSE) Jawahar Navodaya Vidyalaya, Wardha (MH) 94.4

2019 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**

* Programming and Data Structure\*
* Matrix Algebra
* Probability and Stochastic Processes
* Signals and Systems
* Digital Electronic Circuits\* \*courses with lab component.
* Network Theory\*
* Analog Electronic Circuits\*
* Analog Communications\*
* Control Systems Engineering
* Mathematics I & II

**PROJECTS**

**Interactive Construction of 3D Models from Panoramic Mosaics** (May 2014 – present)

* Summer Project under Prof. Prabir K. Biswas, Dept. of E and ECE, 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.

**Analog Electronics (Mini-Project)** (April 2014)

* Mini Project under Prof. Pradip Mandal, Dept. of E and ECE, IIT Kharagpur
* Designing of Op-Amp from BJT’s and analyzing its characteristics and properties under voltage follower, Adder, Inverting Amplifier and non-inverting Amplifier.

**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**

* 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)
* Member of Bronze Winning **Inter-Hall Illumination** Competition. (Oct 2012)
* Awarded **‘C’** and **‘B’** Certificate in National Cadet Corps (West Bengal Division). (2012-2013)
* Awarded **B** grade in Intermediate Grade Drawing Examination conducted by Government of Maharashtra. (2006)