

Tanmay Joshi

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EDUCATION

- **Rajiv Gandhi Institute of Petroleum Technology** Amethi, India
Bachelor of Technology - Electronics Engineering; GPA: 9.53
2020 - 2024
- **Mallikarjun School** Pithoragr, India
Class - 12th; Percentage:93.4%
2018-2019
- **Mallikarjun School** Pithoragr, India
Class - 10th; GPA:10
2016-2017

SKILLS SUMMARY

- **Languages:** Python, C, C++, SQL, Verilog, System Verilog
- **Libraries:** Numpy, Pandas, PyQt5, Scikit, klayout, OpenCv, Tensorflow
- **Tools:** Xilinx Vivado, KLayout, Orcad pspice, Cadence Virtuoso, Google Dialogflow, MATLAB, VScode, Google Colab
- **Platforms:** Linux, Windows, Arduino, ThingSpeak
- **Technical Skills:** RTL Design, Analog Circuit Design, Problem Solving, Software Design and Development
- **Soft Skills:** Leadership, Event Management, Public Speaking, Time Management

EXPERIENCE

- **IIT Gandhinagar** Remote
Project Intern June 2022 - November 2022
 - **Overview:** Worked and developed an Optical Proximity Correction and Aerial Image Simulator with python and klayout
 - **Aerial Image Simulation:** Generates an Aerial Image simulation output in the second layer for a layout present in the first layer of the GDSII file and also saves back the aerial image and one can also visualize the contours generated.
 - **OPC Generator:** Generates OPC for the layout and also can perform iterations to get the best mask solution.

PROJECTS

- **Signal ADC Converter Simulation on Cadence Virtuoso for Audio Applications:** (Work in progress)
Working to develop a simulation of ADC converter with Delta-Sigma converter and Decimation filter for using it in Audio Applications . Tech: Cadence Virtuoso, Verilog
- **Fault Detection in Drill Bits:** (Work in progress)
Research oriented, industrial project, will be replacing the current practice of checking the faults and cracks in drill bits manually through image processing and NDT techniques like ECPT(Eddy Current Pulsed Thermography, Capacitive Sensing, Infrared Thermography). Tech:Python, NVIDIA Jetson Nano, IOT, Embedded Systems, Image Processing, TensorFlow
- **IOT based Weather Station :** (Completed) Link : Github
Designed an iot based weather station using arduino and nodemcu to analyze the weather conditions of the locality and used machine learning to predict the weather status by using temperature and humidity as the input data. Tech: Python, Arduino, NodeMCU, ThingSpeak, Machine Learning. (August '22)
- **System for Covid Vaccination and Hospital Management:** (Completed) Link : Github
Designed a hospital management which can add and display patients record can display the vaccination status of the patient through unique arbitrary Aadhaar Number. Tech: C Programming Language (March '21)

ACHIEVEMENTS

- Third Position in State for delivering a talk on the topic "Harnessing Light Possibilities and Challenges" organised by National Science Centre (Delhi) - August, 2015
- Cracked JEE Advance with the rank of 13673 - September, 2020
- Rank 1st in the Department - Present
- Got 2nd Position for presenting views on Science-Maths Popularization Program in District - September, 2018
- Got Recognition as a Child Scientist from the National Children's Science Congress for presenting research work and data in the sector of Electrical Energy in the District - December, 2016
- Participated and got second rank in college and certificate of Achievement in ICPC(2021) :August, 2021

VOLUNTEER EXPERIENCE

- **Chairperson IEEE RGIPT SB**
An active member of IEEE and leading a team of 100 working members at IEEE RGIPT student branch (November 2022 - present)
- **Joint Secretary at IEEE RGIPT SB**
Coordinated and planned various activities in the student branch as a joint secretary (January 2022 - July 2022)
- **DUGC Student Representative**
Working as an student member at Undergraduate council RGIPT (March 2021 - Present)