

EDUCATION

Bachelor of Technology (B.Tech), Electrical Engineering

Indian Institute Of Technology Roorkee

2018 - 2022

CGPA: 8.38/10

Senior Secondary (XII), Science

Ramanuj Gupta Junior College, Silchar

(ASSAM HIGHER SECONDARY EDUCATION COUNCIL board)

Year of completion: 2018

Percentage: 92.40%

Secondary (X)

Silchar Collegiate School, Silchar

(BOARD OF SECONDARY EDUCATION, ASSAM board)

Year of completion: 2016

Percentage: 96.17%

POSITIONS OF RESPONSIBILITY

Joint Secretary of Artificial Intelligence and Electronics Society, IIT Roorkee

Member of the cell Rural Transformation through Education (RTE) and volunteer for PJF (NGO) during 2018-19

Volunteer in Blood Donation Camp 2018 and Swachh Bharat Drive 2019, IIT Roorkee

Event coordinator for the workshop "Image Processing using MATLAB" during technical festival Cognizance 2019, IIT Roorkee

PROJECTS

Defence Research and Development Organisation SASE UAV Fleet Challenge, Inter IIT Technical Meet 8.0

Oct 2019 - Dec 2019

<https://medium.com/@ariesiitr/coordinated-object-detection-with-swarm-uavs-fe59c376b171>

- Detection of green boxes on green grass through a swarm of three autonomous drones.
- A DNN used for object detection.
- Connection between the drones established through WiFi and communication done via a cloud server provided by Google Firebase.

Image Processing using FPGA | Electrical Department, IIT Roorkee

May 2019 - Jun 2019

- Operated on real-time video, performing image processing on the video frames and changed the color components in each frame.
- TRDB-D5M camera interface and VGA driver used to implement real time Image processing on the Altera DE2i-150 FPGA board.

3 Axis VR Gimbal

Mar 2019 - Apr 2019

- A 3 axis VR Gimbal was developed from scratch using a Raspberry Pi3.
- An Android app was developed to act as an interface between the gimbal and the mobile set for the VR.
- The CAD design of the 3-axis system developed using solidworks.

3D propeller Clock | Artificial Intelligence and Electronics Society, IIT Roorkee

Jan 2019 - Mar 2019

https://github.com/OhmVikrant/POV_message_displayer_project

- Persistence of vision was used to create an optical illusion wherein LEDs turning on and off for specific durations create a 3D clock when rotated at high speed.
- HC595 shift registers and Arduino were the main components for the project.

SKILLS

Machine Learning

Intermediate

Python

Intermediate

Image Processing

Intermediate

OpenCV

Beginner

Deep Learning

Intermediate

HTML

Intermediate

CSS

Beginner

JavaScript

Beginner

C++ Programming

Beginner

Data Structures

Beginner

EAGLE

Intermediate

MATLAB

Beginner

Shell Scripting

Beginner

Verilog

Beginner

Raspberry Pi

Beginner

Arduino

Beginner

WORK SAMPLES

Blog link

<https://OhmVikrant.github.io>

GitHub profile

<https://github.com/OhmVikrant>

Other portfolio link

<https://www.linkedin.com/in/vikrant-dey-6a6b811a2/>

ADDITIONAL DETAILS

- Bagged Bronze medal in the Inter IIT Technical Meet 8.0 DRDO SASE UAV Fleet Challenge 2020
- Stood 9th in Assam Matriculation Examination 2016
- Stood 6th in Mathematics Olympiad 2014
- Stood 3rd in Assam Chemistry Olympiad 2017