## DIVYANSHU BHAIK

# Electronics and Communication Engineering

Persistence, Perseverance and Patience



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## **EDUCATION**

B.Tech. + M.Tech. (Integrated)

NIT, Hamirpur 🕝

07/2017 - Present

CGPA - 8.77

## **PERSONAL PROJECTS**

Smart Road Assistant (10/2019 - Present)

- It is a smart automated electronic device which is designed to predict the possibility of your car crashing into any other vehicle or any other object on the read. This technology is purely automatic and is based on various Deep Learning and Computer Vision Algorithms such as YOLO Algorithm, IOU and Kalman Filter etc.
- The future developments will include the optimization of algorithm to also work under low light conditions (like when the light source is only head light or street light), improving the time of prediction and practical deployment of the project.

## COVID-19 Detection (04/2020 - Present) 🗹

- This project is related to the field of Medical Image Processing where the classification of Chest X-ray images into three classes which are Normal, Pneumonia and COVID-19 is done. The concepts of Image Processing, Computer Vision and Algorithms, Deep Learning and Machine Learning is used in this project.
- The future works includes the completion of the research paper on the same project, improvement of the pipeline used to increase the scores of performance parameters and testing of the pipeline on more transfer learning models.

#### CERTIFICATES AND PROJECTS

LinkedIn Profile 🗹

All **Certificates** are uploaded in Featured Section of my LinkedIn that can be accessed by clicking on the link icon provided in front of heading above.

GitHub Profile 🗹

All of my **Projects** and related works are uploaded in my GitHub that can be accessed by clicking on the link icon provided in front of heading above.

#### **INTERESTS**

Sports (Playing) - Volleyball & Football

Sketching

Dancing

Gym (Calisthenics)

## **SOFT SKILLS**

Punctual

Innovative

Critical Thinking

Event Management

Organization

## **LANGUAGES**

English
Native or Bilingual Proficiency

Hindi

Native or Bilingual Proficiency

#### TECHNICAL SKILLS

## **Programing Languages**

Python, C/C++ and Julia

#### Simulation Languages

System C, Verilog and VHDL

#### Simulation Software

MATLAB, Simulink, COMSOL Multiphysics, ModelSim, EDA Tanner, LabVIEW, Keil uVision5, CST Studio Suite, LT Spice, Eclipse, VS Code, Anaconda and Adobe.

#### Microprocessors and Microcontrollers

Microprocessor (Intel 8085,8086), Microcontroller (Intel 8051), Raspberry-Pi(IOT and Automation), Arduino-Uno, Intel Edison, Node-MCU, FPGA (Verilog).

#### **Core Subjects**

Analog and Digital Electronics, Analog and Digital Communication, Data structures, Neural Network & Fuzzy Logic and Digital Image & Signal Processing.

#### Extra Courses

Machine Learning, Deep Learning, Reinforcement Learning, Computer Vision & Algorithms, Data Science and NLP.

#### **Operating System Experience**

Windows, Ubuntu, Raspbian, Kali, iOS and Android.

## **EXPERIENCE**

## Joint Technical Secretary

ISTE NITH 🗗

09/2018 - Present

NIT Hamirpur

ISTE NITH is Indian Society of Technical Education, NIT Hamirpur. For more information click the link to our website provided in front of "ISTE NITH".

#### Tasks/Achievements

 Management and handling of the work related to the technical team of our society in my institute.

#### Coordinator

## Organization Club NITH

09/2018 - Present

NIT Hamirou

Organization Club of NIT Hamirpur is related to the management organization of the events related to college's Technical and Cultural fests.

#### Tasks/Achievements

Management of Logistics department of the team.

## Member (Final Year)

VIBHAV 🗷

03/2018 - Present

NIT Hamirpur

This is the technical club of our department of Electronics and Communication in NIT Hamirpur, click website link for more information provided above.

#### Tasks/Achievements

Role of Executive Member and Coordinator was taken.