# Harsh Panwar

Email: harshpanwar@ieee.org Mobile: +91-8860428362 Website: harshpanwar.me

DOB: 01-01-2000

### EDUCATION

Jaypee University of Information Technology

B.Tech in Computer Science and Engineering, CGPA: 7.1/10.0

Solan, H.P, India 2017–Current

Delhi Public School

XII<sup>th</sup> CBSE(PCM), Percentage: 93%

Ghaziabad, India 2015–2017

**DLF Public School** 

 $X^{th}$  CBSE, CGPA: 9.2/10.0

Ghaziabad, India 2009–2015

# Internships

# Jaypee University of Information Technology

Research Internship

Solan, H.P, India Summer 2020

- Deep Neural Networks
- Research on Deep Neural Networks and Transfer Learning based approaches towards Medical Imaging and Environmental issues and thus published two International Research Papers.

# Udyog Yantra Technologies

Delhi, India Winter 2019

Machine Learning Intern

- Image Analysis of Food Items by AI on Cloud

 Designed a deep learning model for real-time food items classification and contour area detection of various ingredients present on the food for integrating Industry 4.0 Solutions to help machine manufacturers, system designers and process automation on the cloud.

# **PUBLICATIONS**

- [1] **H. Panwar**, P. Gupta, M. K. Siddiqui, R. Morales-Menendez, P. Bhardwaj, S. Sharma, and I. H. Sarker, "Aquavision: Automating the detection of waste in water bodies using deep transfer learning", *Case Studies in Chemical and Environmental Engineering*, p. 100026, 2020, ISSN: 2666-0164. DOI: 10.1016/j.cscee.2020.100026.
- [2] **H. Panwar**, P. Gupta, M. K. Siddiqui, R. Morales-Menendez, P. Bhardwaj, and V. Singh, "A deep learning and grad-cam based color visualization approach for fast detection of covid-19 cases using chest x-ray and ct-scan images", *Chaos, Solitons & Fractals*, p. 110190, 2020, ISSN: 0960-0779. DOI: 10.1016/j.chaos.2020.110190.
- [3] **H. Panwar**, P. Gupta, M. K. Siddiqui, R. Morales-Menendez, and V. Singh, "Application of deep learning for fast detection of covid-19 in x-rays using ncovnet", *Chaos, Solitons & Fractals*, p. 109 944, 2020, ISSN: 0960-0779. DOI: 10.1016/j.chaos.2020.109944.

# EDITORIAL ACTIVITIES

- Reviewer for IEEE International Conference on Innovative Technologies in Intelligent Systems and Industrial Applications

  CITISA,2020
- Reviewer for Journal of X-Ray Science and Technology

2020

# **PROJECTS**

#### • Fast Detection of COVID-19

2020

#### Goal:

To detect COVID-19 in a real-time scenario with increased transparency while decreasing the computational time and cost using a smaller number of trainable parameters and hence establishing proposed deep learning models as an alternate to traditional RT-PCR testing

## **Supervisors:**

Dr. Pradeep Kumar Gupta

Dr. Ruben Morales-Menendez

### **Outcomes:**

DOI: 10.1016/j.chaos.2020.109944 DOI: 10.1016/j.chaos.2020.110190

# • Automating the detection of waste in water bodies

2020

#### Goals

Detection and classification of the different pollutants and harmful waste items floating in the oceans and on the seashores using our state-of-the-art deep learning model termed as AquaVision and our OpenSource dataset AquaTrash available on Github @ https://github.com/Harsh9524/AquaTrash

### **Supervisors:**

Dr. Pradeep Kumar Gupta Dr. Ruben Morales-Menendez

## **Outcomes:**

DOI: 10.1016/j.cscee.2020.100026

# CERTIFICATES

• Neural Networks and Deep Learning at Deeplearning.ai Credentials Q9DZ6JPCNWTY Issued Feb 2020

• Machine Learning Summer Training at Techstack, Saket

Issued July 2019

### SKILLS

- Languages: Python, C, C++, Java, LATEX
- Frameworks: Tensorflow, Keras, Pytorch, Fast.ai, Django, Flask
- Other: MS Excel, HTML, CSS

### LANGUAGES

• English: language proficiency level: C1

- EXAM: IELTS Academic Overall Band Score - 7.5

• Hindi: language proficiency level: native

## Extracurricular Activities

• Student Member at IEEE Member ID: 96898738 2020-Current

• Team Captain at University Basketball Team Participated in various University level tournaments 2020-Current

• Artic Code Vault Contributor at Github
2020
GitHub Archive Program - Preserving open source software for future generations.

• Technical Writer at Towards Data Science
Wrote 4 articles for TDS with 20,000+ views on Medium.

2019-2020

• Volunteer at Jaypee Youth Club

Developed the website for JYC: www.jyc.co.in

2019

## References

#### Dr. Ruben Morales Menendez

Professor, Tecnológico de Monterrey, Monterrey, NL, Mexico Dean of Graduate Studies at School of Engineering and Sciences

Mail: rmm@tec.mx

### Dr. Pradeep Kumar Gupta

Associate Professor, Jaypee University of Information Technology, H.P, India Department of Computer Science & Engineering and Information Technology

Mobile: +91-01792-239204

 ${\it Mail: pradeepkumar.gupta@juit.ac.in}$ 

# Dr. Mohammad Khubeb Siddiqui

Post Doctoral Investigator, Tecnológico de Monterrey, Monterrey, NL, Mexico

School of Engineering and Sciences

Mail: khubeb@tec.mx