

Harshita DIDDEE

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Website 3228, Sector A pocket B and C, Vasant Kunj, New Delhi, India

CAREER OBJECTIVES

An inquisitive learner who aims to actively contribute to research centered around privacy preserving deep learning architectures. I hope to engage in long term projects that leverage anonymous and aggregative use of private user data like images and audio to build diverse AI architectures.

EDUCATION

2021 **B.Tech, COMPUTER SCIENCE AND ENGINEERING, Bharati Vidyapeeth's College of Engineering, Delhi**
May 2017 > SGPA - 9.20 : IV Semester (College Topper)
CGPA - 9.27

2017 **Higher Secondary School, , The Heritage School, Vasant Kunj**
May 2015 > AISSCE - 95.5% - School Topper
> Computer Science - 97%

Computer Science Physics Chemistry Mathematics English

2015 **Middle School, , Birla Vidya Niketan, Saket**
May 2013 > AISSC - 10 CGPA - School Topper
> Optional Language - French (GP - 10)

Mathematics Science English Social Science

EXPERIENCE

May 2019 **Research Intern, IIT DELHI, Celestini Program India 2019 ,The Marconi Society**
Current > Developing a custom deep learning model which predicts the real time Air Quality Index of an image taken by a smartphone. All the data pre-processing and model inference is carried out on device to avoid the breach of privacy. Federated learning is used to anonymously improve the global model. The Application, named VisionAir, has been released on the Google Playstore.
> *Mentored by Dr.Aakanksha Chowdhery, Google Brain*
Federated Learning Tensorflow Java API OpenCV Python

SKILLS

Programming Languages Python, C, C++, Java
Platforms and Frameworks Tensorflow, Firebase, Shell, Git
Operating Systems Linux (Ubuntu), Windows

PROJECTS

VISIONAIR

2019 - CURRENT

 <http://vision-air.github.io>

Estimating real time AQI from images. Used federated learning to iteratively diversify the model's response and On Device training to ensure that no private user data is shared. The application used a generalised model that eliminated the post processing techniques applied by smartphone in order to get uniform readings across multiple phones.

Tensorflow API for Java Tensorflow Federated Learning OpenCV Firebase

DO IT RIGHT

2018 - 2019

 <https://github.com/harshitadd/Vihaan.git>

An application that uses pose estimation to compare the live video stream of your exercise routine with a sample video to report any erroneous implementation of the exercise. The application uses a relative method of pose slope comparison to avoid error due to a difference in the orientation of the camera, the relative position of the user with respect to the camera, the extent to which he has performed the exercise

Tensorflow OpenCV Flask

HONORS AND AWARDS

October,19	Paul Baran Young Scholars Celestini Prize India 2019 <i>Team Leader, The Marconi Society, IIT Delhi</i>
October,19	1st Runner's Up at Singapore India Hackathon <i>MHDR, AICTE, Education Ministry of Singapore, IIT Madras</i>
March,19	Winner (Rank 1) at Eyantra National Finals <i>Team Leader, IIT Bombay, MHRD</i>
March,19	Winner at Smart India Hackathon 2019 <i>AICTE, ABB</i>
Feb,19	1st Runner's Up at Vihaan : Paytm Build For India Hackathon <i>Paytm, IEEE DTU</i>