ISHA DUA

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EDUCATION

International Institute of Information Technology, Hyderabad *August 2016-Present*
MS by Research in Computer Science and Engineering *GPA: 8.2/10*
Adviser: Prof. CV Jawahar, Centre for Visual Information Technology (CVIT)

College of Engineering Roorkee, Roorkee *2012-2016*
BTech in Computer Science and Engineering *Aggregate: 80.2%*
. *(grabbed 2nd Position)*

St.Ann's Senior Secondary School, Roorkee *2012*
Twelth Standard(CBSE) *Aggregate: 89%*

St.Ann's Senior Secondary School, Roorkee *2010*
Tenth Standard(CBSE) *CGPA: 9.2*

EXPERIENCE

- **Summer internship** for 2 months at **Microsoft Research, India**

- **Teaching Assistant** at Foundation of AIML course conducted by Prof C.V.Jawahar and Prof Anoop Namboodri in collaboration with Talent Sprint(Jan 2018 - May 2018)

- **Conducted lab** on introduction to **pytorch** for Computer Vision and Machine Learning Summer School 2017, CVIT, IIIT Hyderabad

- **Teaching Assistant** at Raman Classes(Feb 2016 - June 2016)

- Internship (June 2015-July 2015) from RWX Technologies on MATLAB

PUBLICATIONS

- **Low-Cost Transfer Learning of Face Tasks**, Thrupthi Ann John, Isha Dua, Vineeth Balasubramanian and C.V.Jawahar

- **AutoRate: How attentive is the driver?**, Isha Dua, Akshay Uttama Nambi, Venkat Padmanabhan and C.V.Jawahar(Faces and Gestures 2019)

- **A computer vision framework for detecting and preventing human elephant collisions**, Isha Dua, Pushkar Shukla, Ankush Mittal. International Conference on Computer Vision(ICCV)-Visual Wildlife Monitoring Workshop, 2017

- **A Vision Based Human - Elepahant Collision Detection System**, Isha Dua, Pushkar Shukla, Ankush Mittal.Third International Conference on Image Information Processing(ICIIP), 2015

ACADEMIC ACHIEVEMENTS AND AWARDS

- Won **first prize** for ML track in **Google Hackthon 2018** where I worked on waste segregation using Machine Learning

- Awarded the **Outstanding mentor award** at Foundations of AIML course

- Secured **first position** at **Microsoft Code Fun Do** 2018

- Secured **6th position** in Grand Finale of **India Hacks** 2017 Hackathon

- Secured **First Position** in CSE Dept, B.Tech **First Year**, 2012-2013

- Secured **Third position** in CSE Dept, B.Tech **Third Year**, 2014-2015

- Secured **Second position** in CSE Dept, B.Tech **Forth Year**, 2015-2016

PROJECTS

Eye Gaze Gaming
supervised by Prof. C.V.Jawahar   *2017*
The project focus on developing web camera based first person shooter game. It provides advance gaming technology to play video games using head pose and eye gaze. Also, extended the algorithm for browsing articles.

As-Projective-As-Possible Image Stitching with Moving DLT
supervised by Prof. Anoop Namboodiri   *2017*
The focus is on the task of image stitching by proposing as-projective-as-possible (APAP) warps, i.e., warps that aim to be globally projective, yet allow local non-projective deviations to account for violations to the assumed imaging conditions

Classification of book genre by cover and title:
supervised by Prof. Avinash Sharma   *2016*
The project use particle filtering algorithm to track elephants and prevent human elephant collision using pattern recognization approaches like Multi class-SVM, neural networks etc to distinguish books into different genre purely based on cover and title without aprior knowledge of context, author or origin

Animation Effects using Image Morphing
supervised by Prof. Vineet Gandhi   *2016*
Using Triangulation method to do morphing between human faces. The idea is to get a sequence of intermediate images which when put together with the original images would represent the change from one image to the other

Human-Elephant Collision Detection System using Particle Object Filtering
supervised by Prof. Ankush Mittal   *2015*
The project use particle filtering algorithm to track elephants and prevent human elephant collision

Breathing Rate using camera   *2017*
It is computer vision project in which using the camera which can be web camera or mobile camera, the breathing rate of the person can be determined

TECHNICAL STRENGTHS

Computer Languages	C, C++, Python, Matlab
ML & Vision	OpenCV, Pytorch, Keras, Pandas

SELECTED COURSE WORK

Digital Image Processing, Computer Vision, Statistical Methods in AI, Machine Learning, Data structures and Algorithm

POSITION OF RESPONSIBILITY

Teaching Asistant at Foundation of AI/ML course
Mentor for machine learning course taken by Prof C.V.Jawahar and Prof Anoop Nambodiri
Placement coordinator IIIT Hyderabad(2017-present)
Member of College Placement Committee

College Placement Committee(2013-2016)

Member of College Placement Committee