

ISHA DUA

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OBJECTIVE

To solve the unsolved problems, to do research with special interest in Image Processing, Computer Vision, Machine Learning, Deep Learning.

EDUCATION

International Institute of Information Technology, Hyderabad *August 2016-Present*
MS by Research in Computer Science and Engineering *GPA: 8.4/10*
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%*
Adviser: Prof. CV Jawahar, Centre for Visual Information Technology (CVIT) (*grabbed 2nd Position*)

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

St. Ann's Senior Secondary School, Roorkee *2012*
Tenth Standard(CBSE) *CGPA: 9.2*

EXPERIENCE

- Teaching Assistant at 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

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[[Paper](#)].

ACADEMIC ACHIEVEMENTS

- 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 focuses 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. ([Video Link](#))

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 recognition 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

August, 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

SELECTED COURSE WORK

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

POSITION OF RESPONSIBILITY

Placement coordinator IIIT Hyderabad(2017-present)

Member of College Placement Committee

College Placement Committee(2013-2016)

Member of College Placement Committee