

Himansu Didwania

hdidwania1997@gmail.com • hdidwania.github.io

EDUCATION

International Institute of Information Technology, Bhubaneswar, India

▪ **B.Tech in Information Technology**

Aug 2016 – Jun 2020

- Relevant Coursework: Pattern Recognition, Data and Web Mining, Principles of Soft Computing, Digital Image Processing

Independent Learning

- Convolutional Neural Networks by deeplearning.ai on Coursera
- Neural Networks and Deep Learning by deeplearning.ai on Coursera
- Machine Learning by Stanford University on Coursera
- Sequence Models by deeplearning.ai on Coursera
- Algorithmic Toolbox by University of California, San Diego & National Research University Higher School of Economics on Coursera

SKILLS

Programming Languages: Python, C/C++

Machine Learning and Data Science: PyTorch, TensorFlow, NumPy, matplotlib

Tools: git, OpenAI Gym

WORK

EXPERIENCE

▪ **Vernacular.ai**

Aug 2020 – present

Working as ML Solutions Engineer

RESEARCH

EXPERIENCE

▪ **Deep Learning for navigation of robots in indoor environments**

Jan 2020 – Jul 2020

Guide: Prof. K. Madhava Krishna., IIIT Hyderabad

- Worked as a research intern in Robotics Research Centre (RRC)
- Worked on the problem of object goal navigation in unknown indoor environments

▪ **Document Layout Generation using Deep Learning**

May 2019 – Jul 2019

Guide: Prof. Ravi Kiran S., IIIT Hyderabad

- Worked as a research intern in Centre for Visual Information Technology (CVIT)
- Formulated the task to approach as a graph generation and sequence generation problem
- Worked on developing a suitable conditional variant of GraphVAE and autoregressive generator for performing the task

▪ **Foreground Extraction using Generative Model**

Jan 2019 – Apr 2019

Guide: Prof. Suvendu Rup, IIIT Bhubaneswar

- Worked on using GANs for segmenting foreground objects from frames of video sequences
- Incorporated a multi-frame and multi-scale approach with conditional GAN for image translation to obtain improved feature extraction

PUBLICATIONS

- **Himansu Didwania**, Subhankar Ghatak and Suvendu Rup. "Multi-Frame and Multi-Scale Conditional Generative Adversarial Networks for Efficient Foreground Extraction". CVIP 2019

OTHER PROJECTS

▪ **GAN for enhancing scene text detection**

- Worked as an intern in CVPR Unit of ISI Kolkata under Prof. Ujjwal Bhattacharya in Decemeber 2018
- Worked on methods to use GANs to extract feature proposals in a deep learning based text detection pipeline

▪ **GAN Family**

- Implemented multiple versions and extensions of GANs from various papers
- Worked on variants including DCGAN, Conditional GAN, CycleGAN, LayoutGAN, etc