

HARSHVIR SANDHU

📍 New Delhi · ✉ harshvir2173@gmail.com · 📞 +918800899720 · 🌐 HarshvirSandhu

EDUCATION

Cluster Innovation Center, University Of Delhi (Third Year) University of Delhi, India
BTech Information Technology & Mathematical Innovations *GPA: 9.38* Nov 2020 - July 2024

WORK EXPERIENCE

Voxomos Systems Private Ltd Remote
NLP Intern 3 months

- **Intent classification:** Built a lightweight Xgboost model for classifying questions sent to a chatbot. This model outperformed sentence transformers and the Tablet model in accuracy and speed.
- **Billing Automation:** Fully automated the process of collecting billing details for the video conferencing platform, Voxmeet.
- **Information Extraction:** Used SpaCy to extract employee details from the input received by Chatbot.

Collins Aerospace (Raytheon Technologies) Remote
Intern 1 year

- **Annotation Automation:** Used image processing for annotating images of hardware defects on a large dataset. The annotated images were used to train an object detection model.
- **Model Deployment:** Deployed Video captioning model on streamlit, to work on the live stream
- **Anomaly Detection:** Built and trained a meta-learning algorithm in PyTorch using prototypical networks to classify images as defective/Not defective with 95% accuracy on the test set.
- **Image Annotation Tool:** Built a streamlit webapp to annotate images for classification and semantic segmentation.

ACHIEVEMENTS

- Winner of Machine Learning Track and Overall Third position in HackGDSC 2.0 for the project Captcha Generator using DCGAN organised by Google Developer Student Club Of VIT University in June 2022.

SKILLS

Python	Numpy	Pandas	OpenCV	Matplotlib
Transformers	Keras	PyTorch	Mediapipe	Selenium
Streamlit	Mediapipe	Selenium	Scikit-Learn	SpaCy

PROJECTS

GUI Based Training *Easyfsl, PyTorch, Streamlit*

A streamlit web app that allows fast training of Few Shot classification models on small datasets using Prototypical Networks with Resnet-18 as the backbone. During Training, model parameters are saved.

Image Segmentation *Albumentations, PyTorch, OpenCV*

Image Segmentation using UNet model in Pytorch. The model takes an image as input and classifies whether the pixels belong to humans in the image or the pixels belong to other objects in the image.

Sign Language Recognition *OpenCV, MediaPipe, Keras*

Sign language detection and recognition project deployed on streamlit to work on Live video

Language Translator *Streamlit, Transformers, PyTorch*

Machine Translation Of English Text to various Local Languages along with text-to-speech translation, and sentiment prediction of Text

CERTIFICATES

Machine Learning with Artificial Intelligence & IoT Using AWS

Completed 4 Week Instructor Led Live Online Training.

Finland Labs

October 2021

Networking Essentials

Successfully achieved student level credential for completing Networking Essentials course June 2021

Cisco Networking Academy