Soumik Rakshit

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SKILLS

C, C++, Java, Python, Machine Learning, Deep Learning, Computer Vision, Tensorflow, Keras, PyTorch

INTERNSHIPS & CERTIFIED EXPERIENCE

IBM, Bangalore, India - *Software Development Intern*

JANUARY 2020 - PRESENT

Highradius, Bhubaneswar, India - *Software Development Intern*

JUNE 2019 - DECEMBER 2019

- Responsible for the development of AI-enabled B2B Fintech Applications.

MonAvis, Bengaluru, India - *Deep Learning Intern*

JUNE 2018 - SEPTEMBER 2018

- Responsible for the Development of Deep Learning Algorithms to solve advanced market research and user experience problems.

EDUCATION

Kalinga Institute of Industrial Technology, Bhubaneswar - *B.Tech. Computer Science and Engineering* (JULY 2016 - JULY 2020)

Bholananda National Vidyalaya, Barrackpore (JULY 2013 - JULY 2015)
Physics, Chemistry, Mathematics and Computer Science

MAJOR PROJECTS

Pneumothorax Detection and Diagnosis

Detection and diagnosis of pneumothorax from chest x-rays using biomedical image segmentation techniques powered by deep learning models including Unet and Unet++ with various backbones.

ENet

Pytorch implementation of Enet for efficient real-time Semantic segmentation on the Camvid Dataset.

AnimeGAN

A Deep Convolutional Generative Adversarial Network with Relativistic GAN Architecture used to generate Faces of Anime Characters.

Nearest Celebrity Face

A Deep Neural Network built with an InceptionV2 Backbone using Tensorflow which predicts the celebrity whose face matches most with the user.

EchoAI

EchoAI is a python package containing all mathematical backend algorithms used in Machine Learning. It is created to provide an implementation of the most promising mathematical algorithms, which are missing in the most popular deep learning libraries, such as PyTorch, Keras, and TensorFlow.

Neural Machine Translation using Base Transformer

Tensorflow 2.0 implementation of the Transformer (base) model for language translation tasks.

ESNet

Tensorflow 2.0 implementation of ESNet: An Efficient Symmetric Network for Real-Time Semantic Segmentation on the Cityscapes Dataset with fine annotations.

Automatic Number Plate Recognition System

Automatic Number/License Plate recognition system for English and Korean(Hangul) Number Plates that uses a Convolutional Recurrent Neural Network trained on over 30000 labeled images. This was an ideation level project done at DeepWrex Technologies.

Fast-SCNN

Tensorflow 2.0 implementation of Fast-SCNN: Fast Semantic Segmentation Network on the Cityscapes Dataset with fine annotations.

Pix2Pix

Tensorflow 2.0 implementation of Image to Image Translation using Conditional Generative Adversarial Networks used to convert Google Map images to Google Earth and generate Cityscape Scenes from segmentation maps.

Image Colorization using GANs

Tensorflow 2.0 implementation of Image Colorization with Generative Adversarial Networks.

Fast-SRGAN

Tensorflow 2.0 implementation of Super-Resolution GAN with a modified generator architecture aimed at real-time inference for 4x super-resolution.

Enhanced Super Resolution GAN

Tensorflow 2.0 implementation of ESRGAN or Enhanced Super Resolution GAN aimed at 4x super-resolution on the DIV2K Dataset.

PUBLICATION

Implementation of Real-Time Skin Segmentation Based on K-Means Clustering Method.

LANGUAGES

English, Bengali, Hindi, German

ACHIEVEMENTS

- Reached 2nd Position on HackerEarth Ad-Hoc Leaderboard.
- Former Rank 1 and a perfect score of 1.0 on the Kaggle Digit Recognition Challenge.
- Became part of the Nvidia Inception Program as Co-founder of DeepWrex Technologies
- Became one of Top 10 developers on Github for Jupyter Notebook Contributions from India. Currently in the 8th position.