SIDDHANT KHANDELWAL

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EDUCATION

Birla Institute of Technology & Science, Pilani *August 2017 - May 2021*
B.E. Computer Science CGPA: 7.77/10

WORK EXPERIENCE

Samsung R&D Institute India June 2021 - Present
Software Engineer (Advanced Imaging) *Bangalore*

- Working on Synthetic Data Generation for Shadow Removal model to be deployed in Samsung Galaxy 2022 range of devices
- Built pipeline to generate synthetic shadow triplets with controls for localization, illumination parameters for image artefacts
- Achieved 35% improvement in BER metric for Shadow removal model trained with generated synthetic data
- Generated 120K synthetic shadow data saving data acquisition costs leveraging skills knowledge in Python, Tensorflow, Keras, PyTorch, OpenCV

A-EYE Softlabs Pvt. Ltd. April 2021 - June 2021
Product Intern (CEO Office) *Hyderabad*

- Built an Intelligent Traffic Management System web app for Hyderabad Police Commissionerate.
- The system supports real-time traffic violations detection, camera health monitoring using Computer Vision algorithms.
- Leveraged knowledge in Tensorflow, Keras, React.js, Python, Flask, AWS and MongoDB

PROJECTS

ERPLAG Compiler January 2020 - May 2020
Compiler Construction Course

- Designed a Compiler for a custom language ERPLAG supporting features like Static and Dynamic Arrays and Functions, Loop Constructs, Control constructs, Arithmetic, I/O Statements.
- Compiler used Error recovery mechanisms for reporting Semanitc, Syntactic errors.
- The generated Assembly Code was compiled using 32-bit NASM Assembler.

Image Enhancement (Deblurring) GAN August 2019 - December 2019
Neural Networks & Fuzzy Logic Course

- Implemented DeblurGAN architecture using Tensorflow, Keras API, Python.
- Achieved competitive results for PSNR, SSIM metrics as compared to original implentation.
- Open-sourced implementation on Github under the guidance of Prof. Surekha Bhanot.

CERTIFICATIONS

Specialization	Instructors
Deep Learning	Sharon Zhou, DeepLearning.AI
Generative Adversarial Networks (GANs)	Andrew Ng, DeepLearning.AI

COMPETITIONS

Bengalathon - DoITE, West Bengal Gov 2019
All India Top 20

We developed a machine learning solution for predicting the probability of a customer defaulting on his driving insurance in the future. We leveraged an ensemble of machine learning classifiers coupled with extensive data preprocessing.
We provided the user with a complete web interface that eased the process of using our software.