

Achal Kamble

Professional Summary

- 3 years of experience in development and validation.
- Programming experience in C, C++, Python.
- Experience in working with Deep Learning Frameworks like Pytorch
- Experience in Optimizing algorithms using ARM Neon intrinsics.

Education

B.E (EE), 2019 passed out from priyadarshini indira gandhi college of engineering, Nagpur, Maharashtra with aggregate of 74.47%.

Skill Set

- Programming Languages: C/C++, Python.
- Experienced with the software tool – PDB and GDB.
- Deep Learning Frame Works: PyTorch

Professional Experience

Company:- Zentreelabs Pvt Ltd, Hyderabad

Project :- Implementation of color conversion and also implement smoothing filter for image processing using arm neon

Description: This project is aimed to optimize the color conversion from the RGB to grayscale ,ycbcr and HSV and also implemented Gaussian filter, median filter and box filter operations for smoothing of an image. The main aim of the project is to optimize resources and improve overall latency of the algorithm.

Responsibilities:

- Implementation of color conversion from RGB to Grayscale , ycbcr and HSV and basic image filtering operations like average Gaussian , median and box filter.
- Optimize the algorithms using arm neon instructions of processing part and verified the latency and functionality of the algorithm.

Project: Integration testing of DVSP library

Description: DVSP library is a set of functions used in pre-processing and post processing of various deep learning models. These functions are implemented in-house to support execution on client's hardware. Worked on the classifier.

Responsibilities:

- Implement Black box test cases for functions used in post processing of classifiers like Resnet50.
- Write integration test cases for classifier models created using pre-processing functions.
- Written automation python scripts to execute unit test cases.

Company:- Neurocrafts Pvt Ltd, Hyderabad**Project:** Face Recognizer Validation

Description: This activity aimed to show case the advantages of using Model cleaver for application in Face recognition pipeline.

Responsibilities:

- Understanding the execution flow of the application
- Identifying the APIs to be tested for proper functionality
- Implementing test cases to validate different APIs
- Validate the integrated application and measure its performance on known dataset.

Project: Deep learning frameworks benchmarking

Description: This activity was to highlight the Pruning & Quantization results of Model Cleaver, which works better compared to the algorithms provided by various DL platforms like Pytorch, Distiller and TensorRT

Responsibilities:

- Setting up pytorch dockers on server
- Run the classifier & detector models considered for benchmarking in the Pytorch framework
- Tabulate the results in the specified format for comparison against Model Cleaver results. Declaration

VECTOR INSTITUTE PROJECTS:

Project Title: OTP generation system for DC device control

Description: The aim of this project to generate an OTP by verifying the password enters by the user. If the entered password is correct then OTP will generate and will send message to the registered mobile number. Then user have to entered the OTP, if entered OTP matches with the generated OTP then we will have the permissions to accesses DC device.

Component:

1. Microcontroller AT89s52
2. EEPROM AT24c08.
3. GSM module Neoway M660A.
4. LCD Hitachi HD44780.

Programming language: Embedded c programming language.

Software for programming: Kill software.

Declaration

I hereby declare that the above-mentioned information is true to the best of my knowledge.

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