

SATYAJIT GHANA

Deep Learning Engineer

Contact Me

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I am a self motivated "Engineer", who loves to learn new technologies and spends quite a lot of time improving myself.

"If it doesn't challenge you, it won't change you"

Education

2017-21 **BACHELOR OF TECHNOLOGY** - Computer Science
Ramaiah University of Applied Sciences
9.0 CGPA - YEAR I-III

2015-17 **SENIOR SECONDARY - XI-XII** - PCM CS
Kendriya Vidyalaya Hebbal
CBSE - 89.8%

Internships

06/2020 to PRESENT

Visual Processing Intern **INKERS** Inkers Technology

- ▶ worked on nvidia deepstream, tensorrt and gstreamer sdk
- ▶ made the system design with c++ design patterns
- ▶ created deepstream plugins to optimize the visual processing pipeline
- ▶ created applications to process AMQP messages and process the pipeline

Skills

★ ★ ★ ★ ★
Langs: C++, Python3, C
Tools: Linux (Debian/Arch)
DL: PyTorch, TensorFlow
App Dev: Flutter
Database: MongoDB

★ ★ ★ ★ ★
Web: React, JavaScript
Ops: Docker, Kubernetes
Git: GitHub
Comm: gRPC, RabbitMQ
CP: CodeChef 4*

★ ★ ★ ★ ★
Ai L^AT_EX
R X_E
Langs: R, Haskell
UI/UX: Illustrator, XD
Docs: LaTeX, MD, rST

Projects

04/2020 to 05/2020

ProjektDepth - Vathos

- ▶ built a custom DNN for monocular depth estimation and object segmentation
- ▶ created a dataset of 1.2M images, performing data scraping to pre-processing
- ▶ wrote documentation using Sphinx and deployed on readthedocs
- ▶ trained the model on TPU (PyTorch XLA) and GPU (Tesla P100)

07/2020 to ONGOING

TheTensorClan - Train a DNN

- ▶ built a python framework on top of PyTorch to quickly train and experiment on a DNN
- ▶ exposes api to add your own models/loss/-dataset/transformations
- ▶ makes it easy for a beginner to learn DL

12/2019 to 03/2020

ProjektBarium - Compiler

- ▶ built a compiler from scratch using LLVM as frontend, flex++ and bison++ as Parser and Scanner
- ▶ used c++14 std style and stl containers throughout
- ▶ github ci/cd for automated build and tests

ProjektZirconium - gRPC - MongoDB

Courses

08/2019 to 01/2020

PadhAI - OneFourthLabs

- ▶ learnt the basic of NN and CNNs
- ▶ built PyTorch models from scratch
- ▶ trained ResNet, Inception, LeNet

01/2020 to 05/2020

Extensive Vision AI - 4.0

- ▶ came out of the "noob" shell
- ▶ built a python library to train and experiment on models using just a yaml config file
- ▶ got accomplishment for the best capstone assignment (ProjektDepth)

Participations

HACKxRUAS - Winner

- ▶ won the first prize for the 24hr hackathon
- ▶ built "KrishiAI" a mobile application to detect plant diseases from images
- ▶ created mobile models (tflite) for using it with Raspberry PI on drones for automated disease detection, and pesticide spray