# SATYAJIT GHANA

Deep Learning Engineer

🕲 shadowleaf.satyajit@gmail.com

🦍 satyajitghana

Shadowleaf.satyajit



+91 7892137665 🔞 satyajitghana



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

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

### **Education**

**BACHELOR OF TECHNOLOGY - Computer Science** Ramaiah University of Applied Sciences

9.0 CGPA - YEAR I-III

**SENIOR SECONDARY - XI-XII** - PCM CS

Kendriya Vidyalaya Hebbal

**CBSE - 89.8%** 

## Internships

#### **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

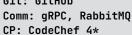






Web: React, JavaScript Ops: Docker, Kubernetes

Git: GitHub





Langs: R, Haskell

UI/UX: Illustrator, XD Docs: LaTeX, MD, rST

## Projects =

#### 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)

#### 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

#### **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

07/2020 to ONGOING

12/2019 to 03/2020

#### PadhAI - OneFourthLabs

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

#### 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

Satyajit Johana

