SAMYAK S SARNAYAK

Undergraduate Student

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- ▶ Bengaluru, India♠ Qwiklabs☐ Coursera
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- in samyaks
- Samyak2



EXPERIENCE

Intern

RuleZero

- Jul. 2020 Present
- Bengaluru, India
- Built a smart search tool to extract data from a legal database consisting of investors, cap table and related information.

Tech Lead

India Against COVID (

- 苗 Sep. 2020 Present
- Working with a team of data scientists and analysts to solve problems which emerged from the pandemic.
- Epidemic modelling and computing factors related to COVID such as case fatality rate.

Tech Core

PES Open Source 🏶

- Sep. 2019 Present
- Bengaluru, India
- Helped organise Hacktoberfest 2019 events at PESU.
- Conducted meet-ups and tutorials.
- Started the browser-history project.

Intern

Deeplogick **(#)**

- Dec. 2019 May 2020
- Trained and deployed object detection models based on SSD MobileNet V2.
- Optimised models to run on GPUs and Jetson Nano using TensorRT.
- Built a model trainer API through a scheduler.

ACHIEVEMENTS



1st place at ISFCR CTF 1

Capture-The-Flag hackathon conducted at PESU



1st place at ISFCR CTF 2

Second edition of the above CTF



2nd Place at AI Challenge, Phase Shift 2019

Recognising and classifying waste products



3rd Place at Gov-TechThon 2020 by IEEE

National level hackathon

PROJECTS

browser-history 😱

- PES Open Source
- Open Source Python Package for retreiving any browser's history.
- Over 50 pull reguests, 2000 downloads on PyPI.
- Presented the project at PyCon India 2020 DevSprints.

fourier-dnn 😱

Tensorflow 2.0 implementation of Fourier feature mapping networks

i Jul. 2020

Anomaly Detection using Self-Organising Maps

- **May** Jul. 2020
- PES University
- Applied the model on data such as Cricket, Tennis and YouTube videos.

Abstractive Summarisation using Reformer

- **ä** Jan. Jun. 2020
- PES University
- Built a decoder-only language model for Summarisation of 24k tokens (approx. 5k words) on single GPU.
- Applied Gap Sentence Generation for self-supervised pre-training.

Bengaluru's Greenest Areas 📢

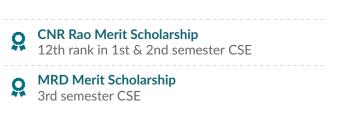
- **May 2020**
- PES University
- 5,38,000 satellite images. Found the percent of green using OpenCV.
- Custom multi-threaded map-reduce in python processes 440,000 entries within 2s.

SVDNN.jl 🞧

Used Singular Value Decomposition to decrease training time of neural networks by 1.2x to 2.7x.

NeuralNetwork.jl 🜎

Custom Neural Network with support for GPU. Optimised using custom GPU kernels (upto 3x speed up).



EDUCATION

B.Tech. in Computer Science and Engineering **PES University**

iii 2018 - 2022 ■ Bengaluru, IndiaCurrently in Fifth Semester. CGPA: 9.73.

Pre-University College - Class 11, 12 Sri Kumaran Children's Home PU College

2016 - 2018

Bengaluru, India

Board: Department of Pre-University Education. Percentage in 2nd year PUC: 95.16%.

Class 9 and 10

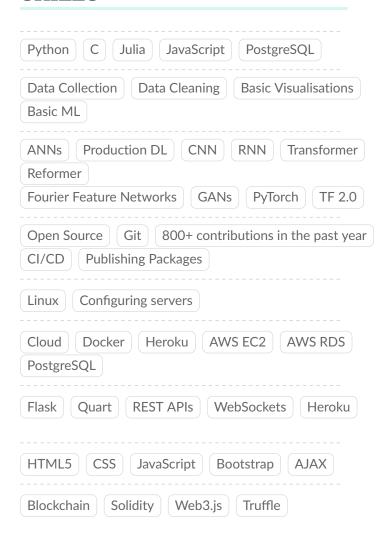
VLS International School

2014 - 2016

Bengaluru, India

Board: Council for the Indian School Certificate Examinations (CISCE). Percentage in Class 10: 92.66%.

SKILLS



CapStyle 😱

Stylized Image Captioning using Deep Learning Models

- **J**un. 2019 Jun. 2020
- CDSAML
- Custom dataset named CapStyle5k derived from Flickr8k. Seq2seq attention models. Achieved 0.6 BLEU.

Park-O-Report 😱

An app to report illegally parked vehicles

- **Mar. 2020**
- HackBout 2020, NMIT
- React native mobile app, TF lite object detection.
- APIs in Flask for Number plate recognition and Geospatial indexing.

Seed Tracking system

Built on the Hyperledger Frabic blockchain

iii Oct. 2020

■ Gov-TechThon

Osintology

Automated collection of social media activity of potential suspects

Feb. 2020 - Apr. 2020

India Police Hackathon 2020

LightSabre 😱

An Ethereum Dapp for luggage tracking using Blockchain

iii Oct. 2019 - Nov. 2019

Sabre Hackathon

BlockChat (7)

A blockchain based messaging application

Sep. 2019 - Nov. 2019

PES University

Intru Sense

Canary Tokens Based Mechanism To Notify Against Intruders

a Jan. 2020 - Apr. 2020

PES University

Miscellaneous

- Recipe Viewer : A web app to aid in cooking. DSC PESU.
- Sentiment Analysis of Tweets : C program to get random tweets and perform basic sentiment analysis.
- Time Series Analysis of Amazon.in data : A data science project about collecting and analysing Amazon data.

LANGUAGES

English Konkani Hindi Kannada

