# SAMYAK S SARNAYAK

### **Software Engineer**

- @ samyak201@gmail.com
- Samyak2
- samyaks.xyz
- in samyaks
- Bengaluru, India



### **EXPERIENCE**

### Software Engineer Chaos Genius

- Sep. 2021 Present
- Bengaluru, India
- Part of the early 10-person tech team.
- Working on the core API, DevOps and Open Source health.
- Managed several releases, revamped alerting system.

#### Summer Intern

### Akamai Technologies (

- May 2021 July 2021
- Bengaluru, India
- Architected and set up a platform to query over existing data lakes (with multiple Petabytes of data).
- Benchmarked Trino to find optimal configuration and achieved 5x+ speedup in query times.

### Co-instructor - Machine Learning with Julia PESU IO 🌐

- Feb. 2021 Mar. 2021
- Bengaluru, India
- Taught the course to 15+ first year students.

#### Intern

#### RuleZero

- **J**uly 2020 May 2021
- Bengaluru, India
- Built a smart search tool to extract data from a legal database consisting of investors, cap table and related information.

#### 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 & 2

Capture-The-Flag hackathons conducted at PESU

## **PROJECTS**

### browser-history (7)



- PES Open Source
- Open Source Python Package for retrieving any browser's
- Over 100 pull reguests, 17,000 downloads on PyPI.
- Presented the project at PyCon India 2020 and 2021 DevSprints.

### sql-assembly 😱

- An embeddable, in-memory SQL Interpreter designed to be used in tests for SeaORM.
- A part of SeaOL's Summer of Code 2022.

# gopy 😱

A compiler for a subset of Go written in Python

# spressolisp 😱

A lisp interpreter written in Rust

### michie 🞧

- A Rust attribute macro that adds memoization to a function.
- Co-authored in a mob programming fashion.

### toipe 😱

- A typing test terminal app written in Rust.
- Over 400 stars on GitHub.

### heiko 🖸

 A fault-tolerant lightweight scheduler to manage servers running on lightweight devices such as phones and Raspberry Pis.

# par-a-graph 😱

Parallelized Pagerank algorithm to achieve upto 4.2x speedup, using goroutines

# skip-list 😱

<b>Y</b> 3	Grand Finale Winners at EY GDS Hackpions 2.0, 3.0 and 4.0 National Level Hackathon	C++ implementation of skip list, logarithmic time operations  July 2020  guntainer  A minimal rootless container r
	Lst place in the NuCypher track at ETHOdyssey Ethereum India Hackathon	
	2nd Place at Al Challenge, Phase Shift 2019 Recognising and classifying waste products	
	Brd Place at Gov-TechThon 2020 by IEEE National level hackathon	Bengaluru's Greenest Area  i May 2020
	CNR Rao Merit Scholarship 12th rank in 1st & 2nd semester CSE	<ul> <li>5,38,000 satellite images. Fou using OpenCV.</li> </ul>
	MRD Merit Scholarship Brd semester CSE	<ul> <li>Custom multi-threaded map-r cesses 440,000 entries within</li> </ul>
EDUCATION		SVDNN.jl () Used Singular Value Decomposi ing time of neural networks by 2
	h. in Computer Science and Engineering	ing time of fledral fletworks by .
<b>=</b> 201	niversity 18 - 2022	NeuralNetwork.jl • Custom Neural Network with suspeed up)
Pre-II	Iniversity (Class 12)	

### Pre-University (Class 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 10 - ICSE

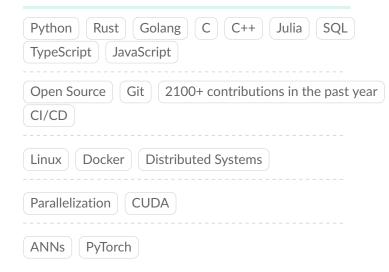
### **VLS International School**

**2014 - 2016** 

Bengaluru, India

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

# **SKILLS**



achieves sub-microsecond

untime on Linux.

### s 😱

- **PES University**
- ind the percent of green
- educe in python pro-2s.

tion to decrease train-1.2x to 2.7x

apport for GPU (upto 3x

Other projects: https://github.com/Samyak2/

## **PUBLICATIONS**

Analysis of Garbage Collection Patterns to Extend Microbenchmarks for Big Data Workloads 🗏 😱

- **July 2022**
- PES University
- Presented at the WOSP-C workshop held at ICPE (International Conference on Performance Engineering) 2022.

Other research: https://samyaks.xyz/research/

# **LANGUAGES**

**English** Konkani Hindi Kannada



See the latest online version of this CV

