

# SAMYAK S SARNAYAK

## Software Engineer

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 Samyak2

 samyak.me

 samyaks

 Bengaluru, India

## EXPERIENCE

### Software Engineer

e6data 

 Feb. 2025 – Present

 Bengaluru, India

- Implemented Variant data type for our custom **query engine**, making it the first after Spark/Databricks to support querying **Open Variant** tables.
- Implemented **distributed join** algorithms - broadcast hash join and shuffled hash join.
- Working on a **Rust** rewrite of the query engine - focusing on concurrent and distributed query execution.

### Software Engineer

Normalize 

 Nov. 2023 – Feb. 2025

 Bengaluru, India

- Architected and built a Snowflake-based data processing pipeline and a queue-based workflow system.
- Built incremental scanning systems for Google Drive and Microsoft SharePoint files, scaling to **10M+ files** scanned.
- Key member of the early (<5-person) SaaS team. Acquired by Proofpoint in November 2024.

### Software Engineer

Chaos Genius 

 Sep. 2021 – Oct. 2023

 Bengaluru, India

- Built a rule-based Snowflake **warehouse optimization** engine, used by Fortune 50 clients.
- Worked on cost-optimizing recommendations for Snowflake SQL queries.
- Maintained core Python libraries and managed releases for both open-source and proprietary products.

### Summer Intern

Akamai Technologies 

 May 2021 – July 2021

 Bengaluru, India

- Benchmarked Trino to find an optimal configuration and achieve 5x speedup in query times. Deployed over a data lake with multiple Petabytes of data.

### NLP Intern

RuleZero 

 July 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.

## 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 ACM ICPE (International Conference on Performance Engineering) 2022.

Other research: <https://samyak.me/portfolio/>

## PROJECTS

### browser-history



 PES Open Source

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

### OtterSql



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

### gopy



- A compiler frontend for a subset of Go written in Python.

### toipe



- A typing test terminal app written in Rust.
- Over 500 stars on GitHub.

### 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.

## Deep Learning Intern

### Deeplogick

Dec. 2019 - May 2020

- Trained and deployed object detection models based on SSD MobileNet V2.
- Optimized models to run on GPUs and Jetson Nano using TensorRT.

## ACHIEVEMENTS

### Winner at langjam0003

Systems with JT

### 1st place at ISFCR CTF 1 & 2

Capture-The-Flag hackathons conducted at PESU

### Grand Finale Winners at EY GDS Hackpions 2.0, 3.0 and 4.0

National Level Hackathons

### 3rd Place at Gov-TechThon 2020 by IEEE

National level hackathon

### CNR Rao Merit Scholarship

1st, 2nd, 3rd & 4th semester CSE

### MRD Merit Scholarship

3rd, 4th, 5th, 6th & 7th semester CSE

## EDUCATION

### B.Tech. in Computer Science and Engineering

#### PES University

2018 - 2022

 Bengaluru, India

CGPA: 9.62/10.0

### Pre-University (Class 12)

#### Sri Kumaran Children's Home PU College

2016 - 2018

 Bengaluru, India

Board: Department of Pre-University Education. 2nd year

PUC: 95.16%

### Class 10 - ICSE

#### VLS International School

2014 - 2016

 Bengaluru, India

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

## likelang

- An experimental dynamically typed, function-first language.
- Made at the week-long langjam0002.

## za-warudo lang

- A highly domain-specific language to procedurally generate 2D worlds.
- One of the winners at langjam0003.

## 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.

## guntainer

- A minimal rootless container runtime on Linux.

## 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 GPU support (upto 3x speed up).

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

See the latest online version of this CV

