

# Sam Radhakrishnan

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## SKILLS

### PROGRAMMING

C, C++, Python, JavaScript, Kotlin, NodeJS, ReactJS, PHP

### MACHINE LEARNING TOOLS

scikit-learn, Pandas, Numpy, Keras

### OTHER

AWS, MongoDB, PostgreSQL, Git, Kafka, RabbitMQ, CUDA, HTML/CSS, Docker, Kubernetes

## EDUCATION

### NIT, TRICHY

**BTECH IN COMPUTER SCIENCE,**  
**8.75/10**

May 2017 | Tamil Nadu, India

## OPEN SOURCE

Rust Language  
Diaspora  
DuckDuckGo Goodies  
DuckDuckGo Fathead  
Coala

## AWARDS

- Finalist, ACM ICPC India Finals 2016
- 26/450, ACM ICPC Amrita Regionals 2016
- Finalist, Build The Shield 2016, Microsoft CTF
- IAS Summer Research Fellow 2015

### ZALANDO SE | SENIOR SOFTWARE ENGINEER

Nov 2020 - Present | Berlin, Germany

- Working on a research team building algorithms to optimise warehouse management for next generation of zalando warehouses
- Designed an improved cart picking algorithm for zalando warehouses, improving the efficiency of warehouse pickers. Designed an A/B test to verify the improvements. The algorithm led to about 1 million euros of savings for Zalando
- Working with Kotlin, Python, Kubernetes, Kafka

### ALPHONSO LABS | LEAD TECHNOLOGIST

May 2018 - Dec 2019 | Bengaluru, India

- Lead a team that built a system to detect ads from normal television programming.
- Designed and implemented video and audio based ad detection algorithms. Used OpenCV, CUDA and FFMPEG to analyse video frames and audio frames
- Designed and built a scheduling service that allows to schedule user jobs and systems jobs on a limited cluster of machines based on priority.
- Built internal tools to debug and monitor services, using D3, React, and Redux.
- Responsibilities included mentoring of junior engineers and interns.
- Working with Node, C++, OpenCV, CUDA, python, Kafka and RABBITMQ

### AMAZON INDIA DEVELOPMENT CENTER | SOFTWARE DEVELOPMENT ENGINEER

Jul 2017- May 2018 | Chennai, India

- Built a web tool for monitoring traffic to Amazon services, and providing statistical information to service owners.
- Worked on a framework for load testing Digital Purchase APIs using AWS SQS.
- Designed and worked on porting an existing perl system for external fraud investigators to JAVA spring, moving to a workflow based system.
- Worked with JAVA Spring and JavaScript.

## LINKS

Github:// sam09  
Codechef:// skidm09  
LinkedIn:// samradhakrishnan

## TECH TALKS

- Video Analysis using CUDA and OpenCV - FOSDEM
- Introduction to Linux

## PROJECTS

### RORSHACH

- A file watcher written in rust that automates mundane tasks.

### TRIP RECOMMENDATION SYSTEM

- Worked on collecting information on social networks to identify popular tourist locations at a city, using selenium.
- Wrote a genetic algorithm to identify the most 'rewarding' sequence to visit places in limited time.

### CUSTOMER RISK PREDICTION

- Worked on building a machine learning model to identify customers who are likely to take a loan.
- Used under-sampling and an ensemble of classifiers to deal with imbalanced data set.

### PRAGYAN CTF 16

- Worked on setting buffer overflow, cryptography and reverse engineering challenges.

### BANDCAMP-DL

- A python package that downloads music
- Close to 22k downloads on Pypl

## PUBLICATIONS

- Krishnakumari,K., Sivasankar, E. & Radhakrishnan (2019) Hyper parameter tuning in convolutional neural networks for domain adaptation in sentiment classification