Sudharsan Thirumalai

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EDUCATION

NIT TRICHY
BTech in Electrical Engineering
July 2019 | Trichy, IN
Cum. GPA: 8.29 / 10.0

LINKS

Github:// **parakalan**
LinkedIn:// **sudharsan-thirumalai**
Twitter:// **@parakalakavi**

COURSEWORK

UNDERGRADUATE
Data Structures and Algorithms
Operating Systems
Database Systems
Pattern Recognition

MOOC
Deep Learning Specialization
Machine Learning Engineering for Production

SKILLS

WORKING WITH:
Python • Tensorflow • PyTorch • Java • Kubernetes • Docker • Kafka • Mongo

WORKED WITH:
C • C++ • CSS • PHP

FAMILIAR:
ElasticSearch • Redis

EXPERIENCE

SPRINKLR | Senior Product Engineer
June 2019 - Present | Gurgaon, IN
Experience with training cutting edge models in NLP and Computer Vision and deploying them with Kubernetes

- Worked on training and deploying end-to-end OCR for Twitter Firehose. This was used by multiple clients to query over messages to reduce spam and take action on misinformed tweets.
- Trained a token classification (NER) model to detect people, brands and products in tweets. We used this model to find the trending brands and products in social media conversations.

MORGAN STANLEY | Software Engineering Intern
May 2018 – June 2018 | Bangalore, IN

- Worked on Kafka, a horizontally scalable, fault-tolerant and fast messaging system, used for building real-time data pipelines and streaming apps. My project work included joining two streams of data using Kafka Streams API. The project was successfully deployed and tested within two months.

DELTA FORCE | Software Engineer
Jun 2016 – May 2017 | Trichy, IN

- Worked on Laravel, a PHP framework, for deploying REST APIs responsible for handling all the college fests. Used by more than 4000 students from NIT Trichy and other colleges. As of 2021, this API is still being used by the club for all the major fests.

PROJECTS

RAGA RECOGNITION
- A Python program to recognize the raga of a Carnatic piece. The program considers the tonal and temporal characteristics and uses the k-Nearest Neighbours technique find the raga of the music.

NETHRA
- An image captioning program for blind people, trained on the Microsoft Coco Dataset with the "Show and Tell" model using TensorFlow. The model was run on a Raspberry Pi connected to a webcam. The program clicks an image, and reads out the caption of the image, with proper grammar.

THE BEER FACTORY GAME
- A supply-chain management game, in which participants manage the production processes of a beer factory and compete against computer simulated opponents or fellow participants. The backend was written in Django

EXTSCRAPE
- A Python command line application to download files matching given extension from any website. The package is available in pip as 'extscrape'. It supports concurrent downloading.

SMART METERING
- A real time fault monitoring system deployed on Raspberry Pi and Intel Edison boards. The Raspberry and Edison act as nodes and measure voltage, current and send data to the server.