# Sudharshan T R

Pursuing MTech. AI at IISc. An avid learner



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### **SKILLS**

Python

NLP



Tensorflow

Machine Learning

Deep Learning

## **INTERESTS**

Basketball

Gaming

Music

## **EDUCATION**

#### **B-Tech CS**

**PES University** 

06/2019 - 05/2023

CGPA: 8.75

#### M-Tech AI

Indian Institute of Science

08/2024 - 05/2026

#### **PROJECTS**

#### Mini HDFS: Big data course final project

- The Hadoop Distributed File System developed here can store and retrieving files in a hierarchical namespace.
- □ The files are stored in a distributed fashion. It can perform Map-Reduce operation.
- Github link:

#### Meaning is all you need: Capstone project

- This project aims to develop a multi-lingual neural machine translation model capable of translating between L languages where the number of parameters increase linearly wrt L.
- Every language has an encoder-decoder pair where the encoder is expected to convert an input sentence into a language agnostic vector which the decoder can convert back into a sentence.
- Paper draft:

#### Mini keras

- The project provides an interface like keras while the implementation is written using only numpy.
- It currently supports Dense, Sequential layer. It also supports various optimization algorithms like SGD, Adam, RMSProp
- Github link:

#### A cluster-embedding algorithm

- This algorithm makes use of the fact that items in the same ideal cluster have similar relationships with other ideal clusters.
- Using this fact, if this relationship is quantifiable, an embedding(vector) can be created for every item based on its relationship with other clusters.
- K-means clustering can be done based on this embedding to come up with new clusters.
- Github link:

### **WORK EXPERIENCE**

# Intern in fake drivers team nVIDIA

01/2023 - 07/2023

#### Tasks:

- □ Enabled dis/assembly of traces with parent surface of surface\_view to be map.
- Made trace assembler to not create a physical file for those surfaces with ZEROS t3d command.
- Removed Hwcygwin dependency of fake driver workflows.
- Completion certificate:

## Internship CCBD@PESU

05/2021 - 07/2021

Tasks

Worked on developing hardware accelerators for Convolution Neural Networks

# **ACHIEVEMENTS**

# Gate CSE 2024 rank 12

Obtained a rank of 12 in the above exam where 1.2 lakh participated. Attached scorecard

PESSAT rank: 167

The entrance exam for PESU with around 20000 students writing the same