# Sreedhar Radhakrishnan

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### **EDUCATION**

#### **CARNEGIE MELLON UNIVERSITY**

MS IN INFORMATION NETWORKING Machine Learning & Systems Track GPA: 3.71/4.0 | MERIT SCHOLAR May 2021 (Expected) | Pittsburgh, PA

#### **PES UNIVERSITY**

BTECH IN COMPUTER SCIENCE GPA: 9.23/10.0 | MERIT SCHOLAR May 2018 | Bangalore, India

### **GRADUATE COURSES**

#### **MACHINE LEARNING COURSES**

Machine Learning (10-601)
Deep Learning (11-785)
ML at Scale (17-700)
Deep Learning Research (14-708)
Applied Machine Learning (11-663)

#### **SYSTEMS COURSES**

Distributed Systems (14-736) Computer Networks (14-740) Operating Systems (14-712) Data Software Engineering (17-601)

## **UNDERGRAD COURSES**

Data Structures & Algorithms Machine Learning & Big Data Web Services & Databases NLP & Information Retrieval Digital Image Processing Theory of Computation

## SKILLS

#### **PROGRAMMING LANGUAGES**

- Java Python Go C PL/SQL CLOUD COMPUTING AND BIG DATA
- AWS Kinesis AWS DynamoDB
- AWS EKS Apache Spark Docker

#### MACHINE LEARNING TOOLS

• Spark MLlib • Numpy • Tensorflow

#### WEB TECHNOLOGIES AND DATABASES

- HTML CSS JavaScript Vue.js Flask
- MongoDB MySQL Go-kit

## ACADEMIC AWARDS

CMU GRADUATE SCHOLARSHIP PES UNDERGRADUATE SCHOLARSHIP USC, VITERBI RESEARCH PROGRAM

#### **WORK EXPERIENCE**

## **ADOBE INC.** | SDE INTERN, EMERGING PRODUCTS GROUP May 2020 – August 2020 | San Jose, CA

- Developed a Machine Learning Data Pipeline using Apache Spark to ingest sentence embedding (generated using BERT) from Slack Cloud onto a MongoDB NoSQL Database using Event Driven Cloud APIs.
- Developed a Recommendation System to provide solutions during deployment failures of Adobe Photoshop (10 million+ users).
- Collaborated with the Adobe Cloud team to integrate the design into the multi-cloud (AWS/Azure/GCP) platform.

## **GE** | SOFTWARE DEVELOPMENT ENGINEER, CLOUD AND BIG DATA August 2018 – June 2019 | Bangalore, India

- Applied Pub/Sub pattern and developed a Cloud-Native Data Pipeline to stream changes of over 5 million assets at the rate of 3000 records/second in real-time using Java, AWS Kinesis and DynamoDB.
- Implemented REST APIs using Go for large-scale retrieval and processing of aviation asset information from over 5 million records.

#### UNIVERSITY OF SOUTHERN CALIFORNIA

RESEARCH INTERN - DEEP LEARNING FOR COMPUTER VISION June 2017 - July 2017 | Los Angeles, CA

- Developed a Cycle GAN model for augmenting synthetic images to realistic urban scenes images. The images were used for training semantic segmentation models for tasks such as pedestrian detection.
- Publication Link: https://ieeexplore.ieee.org/document/8493745.

### **PROJECTS**

## MACHINE LEARNING AND BIG DATA ON THE CLOUD CMU Machine Learning at Scale - Fall 2020 | Pittsburgh, PA

- Engineered high volume ETL Pipelines to ingest 150 GB of Taxi Data from HDFS to AWS S3 using PySpark and AWS EMR.
- Implemented Distributed Linear Regression using Spark MLlib to predict trip duration of taxi rides with an accuracy of 80%. and deployed the model using AWS Elastic Kubernetes Service.
- Link to Medium Article: https://link.medium.com/I0Eu5drJfcb
- Currently a Teaching Assistant for the Spring 2021 offering of the Machine Learning at Scale course by Dr. Heather Miller.

#### DISTRIBUTED FILE SYSTEM FROM SCRATCH

CMU DISTRIBUTED SYSTEMS - SPRING 2020 | PITTSBURGH, PA

• Developed a Distributed File System which supports parallel CRUD operations and Data Replication with Read-Write locks.

#### **DEEP LEARNING DRIVEN WEB SERVICE**

PES University - Undergrad Thesis | Bangalore, India

 Implemented a GAN driven web service that generates and renders multiple car design images from a sketch. https://link.springer.com/chapter/10.1007/978-3-319-99740-7<sub>1</sub>1.