Shiva Santosh

+919573205589
santosh.shanavas@gmail.com
https://sooperdoop.github.io

Education:
- M.C.A Sastra University 77%
- B.Sc Electronics & Tech. Loyola Academy 79%
- Maths, physics, chemistry junior college 77%

Area of Expertise:
- Data Science
- Machine Learning
- Deep Learning
- Data Visualization
- Computer vision

Certification:
- Coursera Machine Learning Stanford University
- Master Course in Tableau 10 & 2019 for Business Intelligence
- Machine Learning, Data Science and Deep Learning with Python

Intro: A Data Scientist passionate about data driven strategies, impactful experiments, with the organised technological stack.

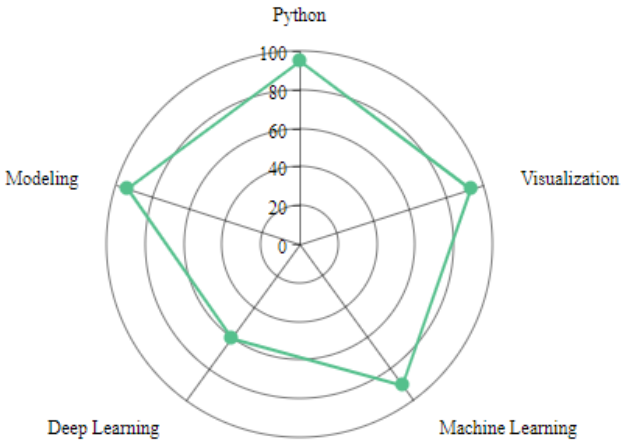
WORK EXPERIENCE

2015 - PRESENT

TATA CONSULTANCY SERVICES

- **2019 - Present *DATA SCIENTIST***
  AGILE COE GRP, TCS Hyderabad, India
  working as a full time Data scientist for CoE group to serve different teams in different geographical locations with divergent clients and problem statements
- **2018 - 2019 *JR.DATA SCIENTIST & DATA ANALYST***
  IOT IOU, TCS Chennai, India
  Worked with TRDDC as a Jr Data Scientist & Data analyst to improve over all Efficiency of a GTCC combine cycle power plant possessed by a Japanese client.
- **2017 - 2018 *IOT & COMPUTER VISION EXPERT***
  IGNITE LABS, TCS Chennai, India
  worked as an iot and Computer vision developer, Delivered an autonomous drawing robot with AI capabilities of pattern generation using computer vision and Deep neural networks.
- **2016 - 2017 *IOT DEVELOPER***
  IGNITE LABS, TCS Chennai, India
  worked as full time IoT developer, Developed few projects based on Robotics and Embedded Technology. And also worked as a trainer of Python, Front end Technologies for 2 batches of 24 each.

Core Skills



Secondary

- ***Sk Learn*** ★★★★½
- ***Pandas*** ★★★★½
- ***Keras*** ★★★★
- ***Computer Vision*** ★★★★
- ***TensorFlow*** ★★★

Achievements and Awards:

- Innovation Pride Award CBO Technology and Innovations CoE
- Ignite AI Hackathon 2.0 Winner
- On the Spot Award Ignite

SOME PROJECTS

I HAVE WORKED ON

Project Description	Technology Stack
• **Multimetric correlation of infrastructure Metrics:** Correlating different Infrastructure Metrics to pre-empt Infrastructure Incidents. Various Infrastructure Metrics like CPU, Memory, Disc etc are recorded using Prometheus. Future Metrics are predicted using XGBOOST Algorithm. Pearson Correlation Co-efficient is used to find correlation among various metrics before predicting. Also implemented single input multiple output techique, Predict infrastructure behavior when workload increased, and provide recommendation through what-if analysis.	Machine Learning (ML), Predictive Analytics, Regression Algorithms, Python, XGBOOST
• **Product Recommendation using Facial Recognition:** A machine learning model is build in AWS cloud for recommending products using Collaborative filtering model. To recommends products based on their past purchase, Once the customer is identified, the recommended products are pushed as SMS to the customer's registered mobile number.	Image Analysis, Collaborative filtering model, Python, OpenCV, AWS Sagemaker.
• **Medical Image Classification (Pneumonia Detection):** For detecting the cases of pneumonia from the X-ray images as early as possible with higher accuracy. Deep learning based solution takes medical images as input, process and generate results with over 98% accuracy at the edge. The solution can work without internet connectivity and generate results at lower latency	Python, Keras, Tensorflow, Deep learning model - VGG16, GCP Cloud ML service, Intel NUC
• **Crowd and Queue detection:** Crowd and Queue detection is ML model based on Convolutional Neural Network. This model helps to estimate and analyze the crowd density, with the help of IP camera , streaming the live feed of the store or block and the feed is processed by the model and detects the persons using CNN algorithms. And the displays the count as well as detected people.	Python, Tensorflow, Keras, OpenCV, CNN Algorithms, Image Processing
• **Visual inspection and Defect detection:** Unet achitecture based image segmentation model to detect defects and damages from the given image and live cam feed,	Python, Keras, Tensorflow, Deep learning model Unet achitecture, Deep Learning (DL), Image Analysis
• **GTCC power plant Model:** Worked with TRDDC as a Jr Data Scientist & Data analyst to improve over alll Efficiency and model a GTCC combine cycle power plant, used to build a digital twin. Random Forest ML model is build and delivered to mimic power plant to test and improve over all Efficiency of real system.	Python, predictive analytics, EDA, Sklearn,Machine Learning Algorithms