Mallikarjuna Tupakula

9-71B Nehru Nagar - 3rd line,Kandulapuram Centre,Cumbum - 523333

+91 7995606199 | tmallikarjuna111@gmail.com | LinedIn | GitHub | pandu-arjun.github.io/

An innovative thinker, curious learner, and self- motivated fellow, Interested in Machine Learning, Deep Learning, Computer Vision, Privacy-Preserving AI and Neuroscience and also interested in reading the research papers and learn new problem-solving methodologies from researchers and trying to apply them in real-world problems.

EDUCATION

Bachelor of Technology in Computer Science and Engg.
2016 - 2020 **RVR & JC College of Engineering**

Computer Vision Nanodegree at Udacity
2019 - 2020

Experience

Research Intern, Indian Institute of Technology, Madras
Dec 2019 - Present
Working in the Computational Neuroscience Laboratory under the guidance of **Prof. Srinivasa Chakravarthy** in the **Neuromotive** team on Deep Learning and Computer Vision.

Research Intern, National University of Singapore, Singapore
Sep 2019 - Oct 2019
Worked on a project Automatic anomaly detection in graphs to find unusually dense subgraphs using deep learning techniques with a Ph.D. student.

Research Intern, Indian Institute of Management, Bangalore
May 2019 - July 2019
Worked under the guidance of **Prof. Trilochan Sastry**. Professor had assigned me to do Research on villages for the development of CCD (**Center for Collective Development**). He founded a startup called **Farmveda** where I worked on Research, Data Analysis, and Digital Marketing.

PROJECTS

1. Image Captioning
It was one of the projects in the Udacity Computer Vision Nanodegree Program which predicts the captions for a given image. I had implemented this project using a combination of CNN and RNN architecture in my model. **Link to GitHub**
Written in: **Python**
Libraries used: **PyTorch**

2. Facial Keypoint Detection
It was a project in the Udacity Computer Vision Nanodegree Program which detects facial key points in an image containing faces. I had an image processing library for processing images and a Machine Learning library for creating a Convolutional Neural Network. **Link to GitHub**
Written in: **Python**
Libraries used: **OpenCV, PyTorch**

3. Supervised Learning approach to Detect Anomalies in Blockchain using Federated Learning.
I was inspired by Research article Chained Anomaly Detection Models for Federated Learning: An Intrusion Detection Case Study. I started working on this project on my

own. A secure and Private AI course on Udacity will help to do this by Federated Learning. **Link to GitHub**
Written in: **Python**
Libraries used: **PyTorch, PySyft**

4. Fake News Detection using Natural Language Processing and Machine Learning
I was inspired by Research Paper "Liar, Liar Pants on Fire": A New Benchmark Dataset for Fake News Detection. **Link to GitHub**
Written in: **Python**
Libraries used: **Scikit-Learn**

5. Finding Lanes in a Road using OpenCV
I had applied basic computer vision techniques to find lanes in Road. **Link to GitHub**
Written in: **Python**
Libraries used: **OpenCV**

SKILLS

Programming: **Python** (Intermediate), **MATLAB** (Intermediate), **C++** (Intermediate), **C** (Intermediate)

Machine Learning (Intermediate), **Deep Learning** (Intermediate), **Statistics** (Intermediate), **Computer Vision** (Intermediate), **Natural Language Processing** (Beginner), **Federated Learning** (Intermediate)

Libraries: **PyTorch, TensorFlow, OpenCV, PySyft**

Operating Systems: **Windows, macOS and, Linux**

Strategic Planning, Digital Marketing

SCHOLARSHIPS

1. Intel Edge AI Scholarship offered by Intel
2. Computer Vision Nanodegree Scholarship offered by Facebook
3. Secure and Private AI Scholarship offered by Facebook

HACKATHONS

1. Finalist in Sabre Hack
2. Participated in American Express CodeStreet'19
3. Participated in Schneider Electric Go Green in the City Challenge 2019
4. Participated in NEC open Innovation Hackathon

LANGUAGES

English (Intermediate), **Hindi** (Beginner), **Telugu** (Native)

INTERESTS & HOBBIES

Reading Research Papers, Sw Reading Books and Magazines, Travelling, Physics, Culture,Hiking,Playing Games, Exploring Technology, Swimming