# Pusthakala Dharan Tej

Hyderabad, India | https://www.linkedin.com/in/dharantej1/ | pusthakala.dharan@gmail.com | +91-9848282831

#### **EDUCATION**

**Keshav Memorial Institute of Technology, (JNTUH)** *Bachelor of Technology (B.Tech.)* 

Computer Science and Engineering

### WORK EXPERIENCE

TEKsystems Global Services [ Associate Software Engineer - Global Data Engineering ]

#### Defence Research & Development Organisation (DRDO), Research Centre Imarat (RCI), India

#### [Software Engineer Intern]

• Avionics Test-bed Automation - Automated and enhanced precision in Avionics Test-bed using Python, optimizing projectiles testing.

· Altair Embed - Model Based Software Development

- · LDRA Static and Dynamic Analysis of Legacy Code for MISRA coding standards using LDRA Tool
- ZynqSoC Testing Development and Testing of embedded applications on ZynqSoC.
- MIL Standard 1553 Communication Protocal Implementation and Testing

• Hands-on experience with Embedded Boards: ARM-I.MX8, Zynq Ultra-Scale and MIL-STD 1553 Interface Board

#### **TEKsystems Global Services**

[ Data Engineering – Data Insights Intern ]

Training and Optimising Machine Learning Models on GCP for Natality Dataset

• Data Prep - Preparing the Natality dataset for analysis and model training.

• Big Query Analysis - Analysing the dataset using Google BigQuery to extract insights.

- · VPC Networks Setting up Virtual Private Cloud networks for secure data handling.
- GCS Storing and managing data using Google Cloud Storage.
- Data Proc Utilising Google Cloud Dataproc for processing large-scale data.
- Big Query ML Creating machine learning models within BigQuery for predictive analysis.
- *Looker* Utilising Looker for data visualisation and exploration.
- Tableau Employing Tableau for creating interactive visualisations based on the analysis results.

## PROJECTS

**Low Light Image Enhancement** - Developed a Convolutional Neural Network system for enhancing lowlight images, improving object detection and scene understanding, while preserving original image content. **Future Scope:** Expanding from the developed CNN system for low-light image enhancement and object detection, its integration into video processing holds promise for real-time improvements in low-light video quality, enhanced object recognition, and broader applications in fields such as surveillance and autonomous vehicles.

<u>Water Quality Analysis using ANN</u> - This Flask application is designed to Accurately Predict the Potability of the given sample of water with 98% accuracy with the help of Deep Learning Model (Artificial Neural Networks).

<u>Crop Type Prediction using Machine Learning</u> - Provides information to cultivate the best food crop based on Soil type, Temperature, Humidity and Rainfall in that area.

**Pi-NAS -** A Raspberry-Pi based Network Attached Storage which makes wireless file transfers easier across your home network using OMV (Open Media Vault based on Debian Linux).

Feb'23 – May'23

Hyderabad 2019-2023 GPA: 8/10

Dec'23 – Present

May'23 – Dec'23

#### <u>The Joy of Computing using Python, NPTEL</u> <u>Data Science for Engineers, NPTEL</u>

<u>Deep Learning, NPTEL</u> <u>Social Networks, NPTEL</u>

#### SKILLS

Languages: Python, C, C++, Java Tools/Framework: NumPy, Pandas, GitHub General: Data Structures, Algorithms, Machine Learning, Internet of Things (IoT), Linux, GCP, AWS

#### EXTRACURRICULAR

• Achieved a perfect score (30/30) in the <u>Australian National Chemistry Quiz (ANCQ)</u> conducted by the <u>Royal Australian Chemical Institute (RACI)</u> in 2016, earning a Certificate of Class Excellence and ranking within the <u>Top 50 students across India</u>.

• Additionally, secured a high percentile score of <u>96%</u> in a <u>National Level E-Quiz on Chemistry</u>, organised by the <u>Department of Physical Sciences</u>, <u>Kakatiya Institute of Technology and Science</u>, <u>Warangal</u> in June 2020.

- YouTuber Content Creation on YouTube for Education and Gaming <u>Delta Edusmith</u> (1.43K Subscribers) <u>Delta Gamesmith</u>
- Served as a <u>Video Editing Head</u> for KMIT's Drama Club 'Abhinaya' <u>Abhinaya The Drama Club</u>.
- · Contributed to the 'Traces of Lenses' Photography Club
- Content writer at <u>Blogger.com</u>.