

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

Hyderabad

2019-2023

GPA: 8/10

WORK EXPERIENCE

TEKsystems Global Services

[Associate Software Engineer - Global Data Engineering]

Dec'23 – Present

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

[Software Engineer Intern]

May'23 – Dec'23

- **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 Protocol 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]

Feb'23 – May'23

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

OBC In-Loop Test-bed Automation (OLTA) - Led On-Board Computer (OBC) loop Test-bed automation, designing and implementing advanced test automation systems using python. Oversaw testing protocols, ensuring optimal performance and reliability in simulated operational environments. Contributed to Aerospace Technology innovation by pushing the boundaries of On-Board Computer systems.

Low Light Image Enhancement - Developed a Convolutional Neural Network system for enhancing low-light 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.

Water Quality Analysis using ANN - 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).

Crop Type Prediction using Machine Learning - 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).

COURSES & CERTIFICATIONS

AWS Certified Developer Associate - DVA C02

The Joy of Computing using Python, NPTEL

Data Science for Engineers, NPTEL

Deep Learning, NPTEL

Social Networks, NPTEL

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 Australian National Chemistry Quiz (ANCQ) conducted by the Royal Australian Chemical Institute (RACI) in 2016, earning a Certificate of Class Excellence and ranking within the Top 50 students across India.

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

• YouTuber - Content Creation on YouTube for Education and Gaming

Delta Edusmith (1.43K Subscribers)

Delta Gamesmith

• Served as a Video Editing Head for KMIT's Drama Club 'Abhinaya'

Abhinaya The Drama Club.

• Contributed to the 'Traces of Lenses' Photography Club

• Content writer at Blogger.com.