

Dubba Tharun Reddy

<https://tharun98.github.io/>

Email : tharunreddydubba@gmail.com

Mobile : +81-90-7007-9936

EXPERIENCE

Yokogawa Electric Corporation

Oct 2019 – Present

Machine Learning Engineer-2

Tokyo, JP

- Responsible for gathering requirements and development of end-to-end ML/DL models at 4 factories.
- Reduced Inference time of images by 40% using asynchronous processing for different segments with RabbitMQ and Celery.
- Developed a new desktop app to complement AI solution for facilitating inspection of images, resulting in reduction of inspection time by a factor of 2.
- Participated in on-boarding of new employees and mentored 2 juniors in the team.
- Enhanced coding standards by establishing guidelines and mandatory code coverage.

Machine Learning Engineer

- Developed and Integrated Deep Learning solution at factories to decrease man-hours for classification of semi-conductor chips by 65%.
- Built CI/CD pipelines using Azure pipelines and Terraform to automate deployments on Azure.
- Migrated structured and unstructured data from 8 factories across different countries into OT Data Lake and provided analytics platform for different consumers.
- Enabled real-time visualisation of transformed production data for factory personnel to enhance productivity using Azure IoT Hub, Spark and Tableau.

Mathworks

May 2018 – July 2018

AI Intern

Hyderabad, IN

- Decreased speed of forward pass in Semantic segmentation of real-world images for autonomous driving by optimizing the model and improved the accuracy by 5%.
- Integrated to MATLAB's Automated Driving toolbox.
- Used by the company in their Autonomous Vehicle for testing on Hyderabad street images data.

Indian Institute of Technology

Aug 2017 – May 2019

Undergraduate Teaching Assistant

Hyderabad, IN

- Teaching Assistant for *Intro to AI&ML*, *Deep Learning* and *Circuits* courses.
- Setting and evaluating assignments, conduct exams, assess student's programming skills, provide feedback and conduct skill building sessions.

PROJECTS

Unsupervised voice activity/Word detection | *Python, Tensorflow*

- Developed an unsupervised deep learning model that can detect voice activity in a speech signal. Useful in VoIP systems for reducing transmitting costs and data usage.
- Achieved 40% accuracy on Phoneme clustering for it's usage on word detection.

Honeywell Aerospace Automation Hackathon | *NLP*

- Implemented language model to parse input from various sensors. Achieved 2nd among 100+ teams.

Story similarity Detection | *NLTK, Numpy*

- Implemented LSH combined with MinHash for efficient similarity hashing using TF-IDF scoring.
- Also tried Community Detection on Tweets and Reuters data for news to find similar stories.

TECHNICAL SKILLS

Languages: Python, SQL, JavaScript, C/C++, MATLAB, HTML, CSS.

Data science: Keras, Tensorflow, Pytorch, Numpy, Pandas, ScikitLearn, OpenCV.

Others: Git, Docker, Azure, Spark, FastAPI, Tableau, Electron, Terraform, RabbitMQ.

EDUCATION

Indian Institute of Technology

Aug 2015 – May 2019

B.Tech, Major in Electrical Engineering, Minor in Computer science; GPA: 8.63

Hyderabad, IN

- Coursework - Data Structures & Algorithms, Computer networks, DBMS, Applied Machine learning, Data mining, Speech systems.
- Extracurriculars - Student Mentor, Publicity Coordinator at Tech fest, Volleyball Club.