# **Dubba Tharun Reddy**

https://tharun98.github.io/

EDUCATION

Indian Institute of Technology

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

Sri chaitanya Junior college

Board of Intermediate Education; GPA: 9.84

Hyderabad, IN

Aug. 2015 - May. 2019

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Email: tharunreddydubba@gmail.com

Hyderabad, IN

June. 2013 - May. 2015

Experience

### Machine Learning Engineer

Oct 2019 – Present

Yokogawa Electric Corporation

Tokyo, JP

- Developed and Integrated Deep Learning solution at factories to decrease man-hours for classification of semi-conductor chips by 50%.
- Design and Migrate different types of data from various sources through collaboration and facilitated usage of Data Lake for other applications.
- Enabled real-time visualisation of transformed production data for factory personnel to enhance productivity using Kafka, Spark and Tableau.
- Identify and Develop new use cases to promote Digital transformation at regional companies. Predominantly OT Data lake, Realwear and AR solutions.

**AI Intern** May 2018 – July 2018

Mathworks 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.

## Undergraduate Teaching Assistant

Aug 2017 – May 2019

Indian Institute of Technology

Hyderabad, IN

- Teaching Assistant for Intro to AI&ML, Deep Learning and Circuits courses.
- Setting and evaluating assignments, conduct exams, paper grading and assisting students with their doubts.
- Conduct Python and Deep Learning skill building sessions.

### Projects

# ${\bf Unsupervised\ voice\ activity/Word\ detection}\ |\ {\it Python,\ Tensorflow}$

Spring 2019

- Developed an unsupervised deep learning model that can detect voice activity in a speech signal.
- Useful in VoIP systems where the cost of transmitting is significant, helps achieve better performance in low bandwidth networks and leads to lower data usage.
- Achieved 40% accuracy on Phoneme clustering for it's usage on word detection.

### Story similarity Detection | NLTK, Numpy

Fall 2018

- 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.

#### **Precision Farming** | TI Innovation challenge

Spring 2018

- Created and Tested GPS based sensor nodes that can communicate with master node in the field and transfer the soil characteristics to a server for data analytics.
- Overlaid the features on maps for near real-time visualization and send text messages for further action to save water, fertilizers.
- One of the semifinalist teams out of 3500 teams across India.

### TECHNICAL SKILLS

Languages: Python, C/C++, SQL, HTML, CSS, JavaScript\*

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

Others: Git, Docker, Azure, Spark, CircleCI, Tableau, ReactJS\*, Terraform\*, Kubernetes\* (\* beginner)