

# Prudhvi Vajja

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## EDUCATION

### INDIANA UNIVERSITY

#### MS IN DATA SCIENCE

Expected may 2021 | B-Town, IN  
Cum. GPA: 3.8/4.0

### B.TECH IN ELECTRONICS & COMM

May 2018 | Kakinada, India  
University College of Engineering  
Cum. GPA: 3.5 / 4.0

## LINKS

Github:// [Prudhvi0001](#)  
LinkedIn:// [Prudhvi Vajja](#)  
Twitter:// [@VPrudhvi0001](#)

## COURSEWORK

### GRADUATE

Applied Machine Learning  
Advanced Database Concepts  
Statistics & Algorithms  
Computer Vision  
Natural Language Processing  
Deep Learning  
Engineering Cloud Computing

### UNDERGRADUATE

Signals & Systems  
Digital Image Processing  
Artificial Neural Networks  
Functional Programming  
Matlab

## SKILLS

### PROGRAMMING

Languages:  
Python • R • Matlab • SQL  
Cloud & DataBase:  
AWS • PostgreSQL • Hadoop  
MapReduce • Spark • Git  
Software Tools:  
Tensorflow • PyTorch • Sklearn  
Keras • OpenCV • Tableau  
ML & Stats:  
Regression & Classification • ANOVA  
Random Forests • Deep Learning  
Clustering • A/B Test • KDE

## EXPERIENCE

### TATA | DATA ANALYST | FULL TIME

June 2018 – June 2019 | New Delhi, India

- Developed an Algorithm using Claims Data to minimize the risk of inventory and saving **150+** hours of man power.
- Created and Optimized SQL Queries using Relational Algebra methods and reduced the run-time by **40%**. Awarded pat on the back.
- Automated the process of Data Cleaning using python and shell scripting.

### IIT BOMBAY | DATA SCIENCE WORKSHOP + INTERN

May 2017 – Aug 2017 | Mumbai, India

- Familiarized with one or more Machine Learning and statistical modeling tools such as R, Matplotlib, scikit-learn, Tensorflow.
- Performed advance **EDA** to determine the climate patterns that effect the crops and built end-to-end regression model on top of it.

### MESH LABS | CONTRIBUTOR + TESTING

Nov 2019 – Present | Bloomington, IN

- Contributed with research associates in developing open source visualization jupyter notebook apps for **NanoHub.org**.
- Created and deployed working apps for visualizing Nano Microbe alignment with live data using 3D models. **NanoparticleShape**.

## PROJECTS

### PLANT PATHOLOGY | KAGGLE | RESNET152 | GITHUB LINK

Implemented a Transfer Learning model with Resnet152 using **TPU** and obtained an Accuracy - **95.4%**

### REAL OR NOT DISASTER TWEETS | KAGGLE | BERT | GITHUB LINK

Created meta features using existing data and used BERT and Glove techniques to improve accuracy from **80%** to **95%**

### POS - TAGGING | PYTHON | HMM/VITERBI | MCMC | GITHUB LINK

Implemented naive bayes, HMM and MCMC / **Gibbs sampling** from scratch to predict parts of speech for each word and attained **95% accuracy**.

### IMAGE ORIENTATION CLASSIFICATION | GITHUB LINK

Implemented AdaBoost Technique from scratch to identify orientation of 40,000 flickr images using NN, DT with accuracy > **90%**.

### DOCUMENT CLASSIFICATION | PYTHON | PANDAS | NUMPY

Implemented LDA and **collapsed Gibbs sampler** for reducing feature space from Bag of words(200X405) to Topic (200X20).

### ROAD TRIP USING A\* ALGORITHM | GITHUB LINK

Implemented **A-star** using consistent heuristic functions to generate optimal paths for multiple constraints.