RESHMIKA DHANDAPANI

Chennai, India | +91-7550254004 | reshmika03@gmail.com | **in** reshmika-dhandapani | **reshmikad.github.io**

EDUCATION

Chennai, India	**Easwari Engineering College**	**2021**

● Bachelor of Engineering in Electronics and Communication Engineering; Grade: **8.67/10 CGPA** (~semester VI)

Riyadh, Kingdom of Saudi Arabia	**International Indian Public School**	**2017**

● 10th - Grade: **10/10 CGPA**

● 12th - Physics, Chemistry, Math & Computer Science; **86.2%**

WORK EXPERIENCE

Junior Machine Learning Engineer	**Omdena**	**Jan 2020-Present**

Working on Identification of Existing Non-Cancer Generic Drugs for Effective Treatment of Cancer Patients using NLP.

Tech Mentor	**The Sparks Foundation**	**Jan 2020 -Present**

Assisting in the growth and development of the interns by guiding them with their tasks and resolving all their technical and non-technical queries.

Data Science and Analytics Intern		**Dec 2020 - Jan 2020**

- Worked on various tasks by translating complex data sets into comprehensive visual representations.
- Applied statistical and algebraic techniques to interpret key points from gathered data.

Machine Learning Intern	**Career Launcher**	**May 2020-June 2020**

- Performed Data Cleaning and Wrangling on several financial stocks and extensively worked on different data exploration and visualization techniques.
- Found the correlation between different stocks and their diversification and created trade calls using Simple Moving Average and Bollinger Bands with 95% accuracy.
- Created a regression model for recognizing discrepancies in prediction and also created a Modern Portfolio Theory.

Undergraduate Project Assistant	**Solarillion Foundation**	**Jan 2019-Dec 2019**

As a project assistant and trainee, I worked on various Arduino projects and Machine Learning models under Research teams.

- Designed a proportional controller algorithm for automatic speed control of a 12V DC motor.
- This setup makes the motor spin at a desired rpm and does not allow any load to affect it.

SKILLS

- Experience in creating **Artificial Intelligence** applications using **Computer Vision, Natural Language Processing, Machine Learning and Deep Learning with Python. Deep Learning Techniques includes ANN, CNN, RNN, Advanced CNN and Advanced RNN with LSTM.**
- Skilled in libraries such as **Keras, OpenCV, TensorFlow, Scikit-learn, NumPy, Pandas, Matplotlib.**
- Platforms and Misc**.: Anaconda, Jupyter Notebook, Spyder IDE.**
- Intermediate skills of **C, C++, IOT** and **Arduino Programming.**
- Basic knowledge of working with **MySQL and Tableau for Data Visualization.**
- Basic knowledge of **Deployment of Models** using **Flask Applications in Heroku and Dockers in AWS cloud.**
- **Interpersonal Skills:** Event Management, Team Management, Public Speaking, Content Writing, Proofreading.

PROJECT EXPERIENCE (THE LINK TO MY PROJECTS IS AVAILABLE [HERE](#))

1. **Flight Fare Prediction Web App Using Machine Learning (09/2020)**
   A machine learning web app to predict domestic flight fare prices in India. Performed various feature engineering techniques and deployed Using Flask on Heroku Platform. Accuracy Obtained: **81.1%** using Random Forest Regression Technique.

2. **Diabetes Predictor Web App Using Machine Learning (08/2020)**
   A ML based Web App to predict Diabetes. Obtained an accuracy of **98%.** Deployed using Flask on Heroku Platform.
3. **Driver Activity Recognition Using Deep Learning (06/2020-07/2020)**
   This model focuses on driver distraction activities via images of the driver using various regression and classification algorithms such as Linear Regression, Decision Trees, Naïve Bayes' and CNN. Obtained an accuracy of **94.33%** Using CNN.
4. **Car Price Prediction Using Random Forest Regression (06/2020)**
   This model predicts the Price of a car based on km driven, age of the car, present price, fuel type etc. Performed feature extraction, data preprocessing, hyper parameter tuning and applied machine learning models to obtain output. R2 score: **0.866**.
5. **Sentiment Analysis with Amazon Reviews using NLP (05/2020-06/2020)**
   Dataset taken from Kaggle. Natural Language Processing (NLP) to predict whether the sentiment of review is positive or average or negative. Models applied: Naive Bayes Logistic Regression, Long Short-Term Memory (LSTM) with GloVe. Accuracy: **91.3%.**
6. **Social Distancing Tracker Using OpenCV (05/2020)**
   This project will detect if people are following physical distancing and will send an alert if not. The module is built using pre-trained YOLO model on COCO dataset with OpenCV.
7. **Face Mask Detection Using OpenCV (04/2020-05/2020)**
   A real-time face mask detector from CCTV camera which detects and sends alert if face mask is not worn. Accuracy: **95.65%.**
8. **Sign Language to Text and Voice Conversion Using Machine Learning (12/2019 – 1/2020)**
   A translator that can detect hand gestures in an image and translate its meaning to text and speech using Convolutional Neural Networks (CNN). This translator performs image processing and applies Machine Learning over real time video streaming to recognize the gesture and decode its meaning. Accuracy Obtained: **89%.**

CERTIFICATIONS

- **Business Metrics for Data Driven Companies**
  (08/2020-09/2020)
  Coursera
- **Deep Learning Specialization** (04/2020 – 06/2020)
  Deeplearning.ai
- **PCAP: Programming Essentials in Python**
  (03/2020 – 04/2020)
  Cisco Networking Academy

- **Machine Learning: Python in Data Science**
  (12/2019 – 02/2020)
  Udemy
- **Internet of Things Workshop** (01/2019)
  IIT Madras
- **IOT Implant Training** (12/2018)
  BSNL

LEADERSHIP SKILLS

- **ECE Department Representative** (Vulcans) College Cultural Team (2019-Present)
- **Core Committee Member** (Retweet) Inter-College Cultural Team (2020-Present)
- **Community Chairperson** - Rotaract Club of SRM Easwari Engineering College (2019-20)
- **Joint Secretary** - Rotaract Club of SRM Easwari Engineering College (2018-19)
- **Cultural Secretary** International Indian Public School (2015-2016)
- Served as the **Master of Ceremonies** at various events conducted at SRM Easwari Engineering College(2018-Present)
- Active member of **IETE** (Institution of Electronics and Telecommunication Engineers)
- Active member of **SECE** (Society of Electronics and Communication Engineering)