### PREM SINGH RAWAT

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Ajmer, Rajasthan, IN

#### **EXPERIENCE**

## Data Science Intern Digite Infotech Pvt Ltd

- **August 2021 October 2021**
- Bangalore, Karnataka, IN
- Responsible for performing data science and statistical experiments, make presentations and reports.
- Worked on NLP based contextual similarity where wrote python code for text preprocessing pipeline and corresponding pytest cases.
- Analysed behavior of the users on in-house product using statistical tests, sankey charts and machine learning techniques.

### Deep Learning Intern

#### Introtuce Pvt Ltd

- **February 2021 July 2021**
- Tiruchirappalli, IN
- Responsible for working on Data Acquisition, Data Cleaning or preprocessing, writing codes for deep models, training and analysing the model performances.
- Worked on Person Semantic Segmentation project for background remover. Used model architectures like U-Net, Advance-UNet where pretrained ResidualNet and MobileNetV2 models as backbone
- Applied model optimization techniques like Pruning, Quantization and student-teacher network training to get optimized tf-lite model in order to deployed into mobile devices.

### **PROJECTS**

# Car Semantic Segmentation on Images Car Background Remover

- Solved the problem using encoder-decoder convolution network for semantic segmentation in order to get precise shape of object.
- Pre-processing or transformation of images using image augmentation techniques within tensorflow dataset input pipeline.
- Used MobileNetV2 as backbone of encoder-decoder network and trained the full architecture. Got 98% MIOU.

# Factors Affecting Concrete Compressive Strength Regression Study

- Objective is to Modeling the strength of high performance concrete using Machine Learning techniques.
- Performed univariate and multivariate analysis, feature engineering, outliers detection and removal.
- Applied Linear Regression and Random Forest with cross validation and hyperparamter tuning technique. Final R-Squared range 0.92 to 0.96 with 95% confidence level.

### **EDUCATION**

### M.Sc. Big Data Analytics Central University of Rajasthan

**i** July 2019 - July 2021

### B.Sc. Computer Science Central University of Rajasthan

**i** July 2016 - May 2019

# 12th Science Maths JNV Ajmer

**April** 2015 - May 2016

### **SKILLS**

Statistical Analysis	
Machine Learning	••••
Deep Learning	••••
NLP	••••
Python	••••
Pandas/NumPy	••••
Scikit-learn	••••
TensorFlow	••••
SQL	••••
MS Excel	••••
Flask	••••
C/C++	••••
Java	••••
HTML/CSS	••••

### Financial Tweets Sentiment Analysis

#### **Stock Behavior Prediction**

- Aim of this project is to predict stock price based on sentiments of tweets from top financial experts/authors.
- Extract tweets about various companies data using stocktwit API. Applied imbalance handling techniques. Applied ML and DL techniques.
- Used pretrained word vectors GloVe for word-embedding and then applied CNN for classification and got 90.57% AUC score.

## Developed Car Price Prediction System End-to-End

- Objective is to develop an algorithms for predicting price of Car based on given characteristics.
- Applied Data Cleaning, Exploratory Data Analysis, Feature Engineering and Statistical tests.
- Used ML models like Linear Regression, Decision Tree and Random Forest. Deployed best model using streamlit.

### Medical Insurance Customers Analysis Applied Statistics

- Objective is to extract and drive the valuable insight from medical cost data of peoples.
- Extract distributions and outliers present in attributes of customers with the help of scatter, box-and-whishker, density and pair plots etc.
- Performed permutation test, t-test and ANOVA test. Got statistical evidences about charges of people who smoke is different from who don't and proportion of smokers in male and female is different.

# Classification of DeepWeedsX Images Kaggle Problem

- Objective is to develop an automated system which identify the weed by their corresponding image.
- Taken dataset from kaggle and used transfer learning techniques to classify images into 9 classes of weeds.
- Got 83% validation accuracy using transfer learning through MobileNet V3 Large pretrained model.

### **CERTIFICATIONS**

# TensorFlow Developer Coursera - DeepLearning.Al

**a** Jan 2021 - July 2021

## Deep Learning

**Sep 2020 - Dec 2021** 

## Applied NLP

**Sep 2020 - Dec 2021** 

## Python for Data Science NPTEL

Ct 2019 - Nov 2019

### Excel skills for Business

#### Coursera

**Aug** 2020

### **LANGUAGES**

Hindi



**English** 



### **REFEREES**

#### Assistant Prof. Vikas Kumar

@ University of Delhi

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