# Pranay M. Bobade

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## CAREER OBJECTIVE

As an enthusiastic Python-Al developer and Data Scientist, I am dedicated to expanding my technical expertise and leveraging it in the domains of machine learning, deep learning, and data science. With a strong foundation in Python, I'm actively engaged in deep learning and computer vision, supported by valuable experience gained during my recent internship, where I worked on data science projects and contributed to innovative solutions in these fields.

## **EDUCATION**

## G H Raisoni Institute Of Engineering And Technology, Nagpur

August 2019 - August 2023 7.86 CGPA

Bachelor of Technology in Artificial Intelligence

7.00 CGPA

## Prerna Junior College, Nagpur

February 2019

Higher Secondary Certificate

## Smt. G. G. Sarda Higher English School (AVM), Nagpur

March 2017

Secondary School Certificate

## **WORK EXPERIENCE**

#### **Data Science Intern**

January 2023 - July 2023

#### Lincode Labs India Pvt. Ltd.

- Worked on real-time projects as well as products which primarily focuses on visual inspection of the industrial based equipment for better productivity and Effectiveness.
- Created docker containers for inference of object detector models to eliminate dependencies issue.
- Written python scripts for extracting result information and coordinates from the YOLO inferred images in txt (darknet), json and xml formats for auto annotation work.
- Written python scripts for image filtering and image segmentation.
- Worked on MongoDB using python pymongo library to store unstructured data eg. images and videos
- Used Redis to manage cache memory and to trace the code base while testing.
- Worked on data collection, data preprocessing, data augmentation, model training and model inference.
- Also worked on Python GUI library tkinter and ctkinter for user interface and integrating it with backend codebase.

#### **Data Science Intern**

August 2021 - September 2021

#### The Sparks Foundation

- Prediction of data using supervised machine learning techniques such as Linear Regression and Logistic Regression.
- Prediction of data using unsupervised machine learning techniques such as K-means clusters.
- Using that prediction to analyse and extract useful insights.

#### **PROJECTS**

## Object Measurement Using OpenCV

- The approach was to measure the dimensions of any objects in our day-to-day life like books, phones, etc using computer vision libraries like opency.
- To eliminate the high and complex mathematical computation, I have used Aruco marker which is already in-built in our augmented physics and has a fixed dimensions of 5x5.
- Aruco markers act as a reference object inside the frame to detect and measure the dimensions of other objects.

## **Plant Disease Detection System**

- The approach of the project was to detect the disease of the infected plants.
- We used Deep learning techniques i.e. convolution neural networks to deal with this detection problem.
- We trained our dataset using a custom Convolutional Neural Network (CNN) that we built using the TensorFlow framework in python.

## SKILLS AND LANGUAGES

**Technical Skills**: Python | Machine learning | Deep learning | Computer vision | Mysql | MongoDB | Redis | Docker | Git | Flask | Ubuntu linux | Windows |

Soft Skills: TeamWork | Communication | Storytelling | Curiosity | Leadership | Management

Languages: English | Hindi | Marathi

## **ACHIEVEMENTS**

- Published research paper in IJSDR on Plant Disease Detection System.
- 3rd Runner Up in Wells Fargo Quantitative Al Hackathon (IIT, Madras)