

PRAJUAL PILLAI

ML Engineer

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EXPERIENCE

ML Engineer

Searce Inc.

July 2021 – Ongoing

Pune, India

Client: Healthians

September, 2022 – Ongoing

- Developed collaborative filter based recommendation system using **Tensorflow-recommenders** to recommend medical tests to clients
- Trained, tuned & deployed an **80%** accurate model in **AWS Sagemaker**
- Deployment of the same also done using **AWS Lambda** & **AWS ECR**
- Setup **AWS API Gateway** as the trigger for the Lambda deployment
- Performed exploratory analysis of over **6TB** of data in order to identify and aggregate parameters for the model

Client: Flipkart

January – September, 2022

- Worked with Google team to migrate **3PB** of on-prem data to GCS
- Mapped bucket & object policy from **AWS** to **GCS** at scale
- Deployed the **multi-threaded** python code on **GKE** for data migration
- Performed data verification & analysis of the copied objects at **scale**

Product: Recognic

August – December, 2021

- Used **DML** to build models to extract text from custom documents
- Utilised **Vision API** to extract text from generic documents
- Increased performance of existing code by **50%** by optimising the encoding used for the vision calls

COURSE PROJECTS

Bengali digit recognition

Guide: Prof. Amit Sethi, IIT Bombay March - June, 2020

- Achieved **95%** accuracy while training a **9** layered **CNN** sequential model
- Extracted Bengali digits from an image after **binarising**, **contouring** & **segmenting** using **OpenCV** library

Employee Attrition Classification

Guide: Prof. Amit Sethi, IIT Bombay January - May, 2020

- Data pre-processing carried out using heat maps, feature engineering, label encoding and standardisation.
- Performed classification using **LDA**, **QDA**, **KNN**, **SVM** & **random forest**
- Achieved an accuracy of **91%** & **89.8%** on the testing & validation sets respectively while using **LDA** model

Indoor Positioning Using Wi-Fi signal

Guide: Prof. Vinay Kulkarni, IIT Bombay Sep' - Nov', 2020

- Performed classification to locate a device using its WiFi signal strength
- Imputed** missing values in the dataset using **mean**, **median** & **KNN**
- Compared performance of various classification models such as **LDA**, **QDA**, **SVM**, **Decision Tree** & **KNN**

EDUCATION

M.Tech, IIT Bombay

Manufacturing Performance- 8.79 2021

B.Tech, Kerala University

Mechanical Performance- 7.45 2017

Intermediate, St. Fidelis College

I.C.S.E Performance- 81.3 2013

ACHIEVEMENTS

Secured **99.22** percentile in Graduate Aptitude Test in Engineering (GATE-19) among **1.67 lakh** candidates

CERTIFICATES

GCP: Professional ML Engineer, Associate Cloud Engineer

Coursera: Applied Data Science Capstone, Neural Networks and Deep Learning, Python for Data Science and AI

TECHNICAL SKILLS

Programming: Python, Java

AWS: S3, Sagemaker, ECR, Lambda, Glue

GCP: GCS, BigQuery, Pub/Sub, Spanner, Cloud Functions, App Engine, VertexAI, Cloud Scheduler, **Vision API**, **Cloud Composer**

Visualization: Matplotlib, Folium

ML Frameworks: Tensorflow, PyTorch

EXTRA CURRICULAR

- Represented Mechanical Dept. in the PG inter department volleyball tournament at IITB.
- Represented Hostel 12 in volleyball in the Hostel Championship 2020, IITB.