

Ishwar Sawale

DATA SCIENTIST · MACHINE LEARNING RESEARCHER

☎ (+91) 82-3744-2227 | ✉ ishvarsawale@gmail.com | 🏠 ishvarsawale.com | 📷 ishvarsawale | 🌐 ishvarsawale | 🐦 @ishvarsawale

Summary

I have 2+ years experience in Data Science. Currently, I am working with Mindstix Software Labs as Data Scientist. At Mindstix I am working on Recommendation Systems. Prior to Mindstix, I was working with Coriolis Technologies Pvt Ltd for 2 years as Machine Learning Engineer.

Education

Diploma in Big Data Analytics

CDAC-ACTS PUNE

Pune, India

Aug. 2015 - Feb. 2016

- Achived grade A with 70.00%

BE in Electronics & Telecommunication

UNIVERSITY OF PUNE

Pune, India

Aug. 2011 - May. 2014

- Achived Distinction with 69.33%

Diploma in Electronics & Communication

MSBTE, MUMBAI

Mumbai, India

May. 2008 - Aug. 2011

- Achived Distinction with 85.38%

Work Experience & Responsibility

Mindstix Software Labs

DATA SCIENTIST

Pune, India

Feb. 2018 - PRESENT

- Recommendation Systems for Retail Business
- ChatBot Framework Based on RASA NLU

Coriolis Technologies Pvt Ltd

MEMBER OF TECHNICAL STAFF

Pune, India

Mar. 2016 - Feb. 2018

- Developer & Scrum Master for Cloud Team
- Rails Backend Development for Orchestration tool
- Development of Ansible, Chef and Puppet configuration managers
- License Plate Recognition, Face Recognition

Skills & Courses

Tools	Git, LaTeX
Stacks	MongoDB, MySQL, Neo4J
Languages	C, Python, Java, Go, R
Frameworks	Ruby On Rails
Web Technologies	HTML
Machine Learning	Tensorflow, Keras, Pytorch, OpenAI

Courses

- Neural Networks and Deep Learning by deeplearning.ai on Coursera
- Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization by deeplearning.ai on Coursera
- Structuring Machine Learning Projects by deeplearning.ai on Coursera
- Artificial Intelligence A-Z Learn How To Build An AI on Udemy
- Deep Learning A-Z Hands-On Artificial Neural Networks on Udemy
- Practical Deep Learning with PyTorch on Udemy
- Machine Learning A-Z Hands-On Python & R In Data Science on Udemy
- The Complete Android Kotlin Developer Course on Udemy
- Complete iOS 11 Machine Learning Masterclass Course on Udemy
- Deep Learning and NLP A-Z™: How to create a ChatBot on Udemy
- Complete Guide to TensorFlow for Deep Learning with Python on Udemy
- CWorkshop in Probability and Statistics on Udemy
- Building Practical Recommendation Engines on Udemy
- ChatBots: Messenger ChatBot - DialogFlow and nodejs on Udemy

Machine Learning Section

User-User Collaborative Filtering

Mindstix Software Labs Project

NEO4J, PYTHON

- Personalized recommender algorithm which learn from past agreements to predict future agreements
- It uses the concept of similarity in order to identify users
- Instead of traditional approach of matrix factorization, Graph database is used

User-Item Content Based Filtering

Mindstix Software Labs Project

TENSORFLOW, PYTHON

- Singular Value Decomposition (SVD) is used to estimate the size of the basket that we want to predict
- In the second step, we will predict n products which we believe that user will buy in his next order
- TensorFlow based implementaion of SVD

License Plate Recognition System

Coriolis Project

OPENCV, PYTHON

- This project was used to auto-detect License Plate in car and fetch license number
- I have used OpenAlpr library along with handcrafting features for License Plate detection
- Custom OCR was trained and used to predict each individual number from license plate

Cancer Survival Prediction

CDAC Project

R

- This was group project. My role was to develop & predict model for survival of patients
- Dataset was obtained from seer.cancer.org and it has various cancer types with patients data
- Hypothesis was if cancer is detected in early stage and at early age then chances of patients survival are more

Real Time Face Recognition

Open Source Contribution

PYTHON, TENSORFLOW, FACENET, KERAS

- This project was to detect and recognise faces in real time(in video)
- Apart from Traditional methods of face recognition, I have used embedding of two faces as measure to differentiate them
- Pretrained model from Facenet is retrained for my dataset
- I have taken video frame at x miliseconds
- After that, created embedding and compared with model for each frame

Festival Recognition App

[Open Source Contribution](#)

JAVA, TENSORFLOW, ANDROID

- This is an android app, which detects type of Indian Festival after taking image from Camera or gallery
- For this app I have collected thousands of images for Holi, Diwali, Eid, Birthday, Marriage
- Then I used Inception V4 model from ImageNet and retrained it on above dataset
- This retrained model is optimised for Android by rounding graph and making it compatible for android platform

Hand written digits classification

[Open Source Contribution](#)

JAVA, TENSORFLOW, ANDROID, KERAS

- This is an android app, which detects number drawn by user between 0 to 9
- I have used MNIST dataset for training two different model with Tensorflow and Keras
- User can draw any digit and prediction from two models are given

Data Science Section

Ghouls, Goblins and Ghosts

[Open Source Contribution](#)

NUMPY, PANDAS, SKLEARN

[kaggle.com](#)

- "Ghouls, Goblins, and Ghosts... Boo!" dataset from Kaggle.com
- Classify monsters based on input parameters
- Used SVM, RandomForest classifiers

Machine Learning from Disaster

[Open Source Contribution](#)

NUMPY, PANDAS, SKLEARN

[kaggle.com](#)

- "Titanic: Machine Learning from Disaster" dataset from Kaggle.com
- This is a binary classification problem
- Predict whether passenger survived or not

Publication Section

Real time Face Recognition Article

[Open Source Contribution](#)

LINKDIN ARTICLE

Sep 2017

- Article about Face Recognition in Video

REST Client in GO

[Open Source Contribution](#)

LINKDIN ARTICLE

Sep 2017

- Article about writing curl like tool in GO lang

Indian Festival Recognition App

[Open Source Contribution](#)

LINKDIN ARTICLE

Aug 2017

- Article about how to retrain Inception V4 model & use it in Android app

MNIST Demo on Android

[Open Source Contribution](#)

LINKDIN ARTICLE

Aug 2017

- Article about using TensorFlow in Android app

Core Development Section

Orchestration Chef, Puppet, Ansible

[Client Project](#)

RAILS, MONGO, CHEF, PUPPET, ANSIBLE,

REST API

- I was working as Team Lead and Lead Developer for this project
- Use case is - client have certain products that need to be managed using configuration manager
- Using either Chef, Puppet or Ansible, we can perform job like install agent, register agent, upgrade agent etc

Soap client in C

[Client Project](#)

C, SOAP

- I maintained & added new features

REST API client in GO Lang

[Client Project](#)

GO, REST CLIENT

- I developed this app, which is replacement of curl

Automate Instance Creation AWS

[Client Project](#)

BASH, AWS CLI, AWS

- Tool for migration of VMware vSphere OVA to AWS AMI

Migrate Existing OVA to Azure

[Client Project](#)

BASH, AZURE CLI, AZURE

- Migration of VMware vSphere OVA to Azure

Rails Backend Development

[Client Project](#)

RUBY, RAILS, MONGO, REST API

- It was dating app, just like tinder
- REST API implementation for various feature request

Android Apps in Kotlin

[Open Source Contribution](#)

KOTLIN, ANDROID

- Android Apps using Kotlin language