## Ashwin Joshi

# Machine Learning | Data Science | Python PySpark | NLP | Power Bl | Cl CD

- Aspiring for a career in Data Science and Machine Learning that places me
  in a challenging position in a fast-paced and learning-oriented
  environment for developing my technical and interpersonal skills with my
  abilities, skills and commitment.
- A competent professional with 3 years of enriching experience in data science and machine learning platform and related visualisation tool
- Strong statistical knowledge.
- Extensively used Numpy, Pandas, Scikit-learn, PySpark for data analysis for classification, regression and prediction model building.
- Hands on experience on Predictive modeling, regression, classification and clustering algorithm
- Hands on experience in implementing PCA,LDA, Random Forests, Decision Trees, Linear and Logistic Regression, SVM, Clustering, neural networks.
- Wide experience in Natural Language Processing using Spacy ,NLTK libries.
- Experience on pretrained models like BERT to develop QA systems
- Experience in image processing deep learning architecture like CNN,AlexNet.
- Experience with cloud-based platform on Azure as deployment tool.
- Pursuing a Ph.D. in Mechanical Engineering.

### **Experience**

### Mass Technologies , Pune Machine Learning Specialist

From Nov 2018 working with Mass Tech on DS and ML platform.

Nov 18 – till date

- 1.Design machine learning systems.
- 2. Select appropriate datasets and data representation methods.
- 3.To perform statistical analysis and fine-tune models using test results.
- 4.To develop Machine Learning algorithm according to requirements..
- 5. Utilized PySpark to develop Machine Learning algorithms.

#### Savitribai Phule Pune University.

Jan '09 – -May'18 Assistant professor in engineering college.

- 1. Built strong industry institute interaction.
- 2. Career counseling and project guide

## Siemens PLM Software (I )Ltd.

### Implementation Engineer.

Sept' 07 – Dec '09

- 1.To generate Teamcenter ITK, plugin customization programs for setting up workflows, writing handlers, item creation and enhancements.
- 2.Expert knowledge of routers product life cycle and change. management, flow management.
- 3.Expert in PLM & PDM technologies.

### Kalyani Forge-Pune, India.

- 1.Expert of cutting edge technology.
- July '03 –
- 2. Design and development of
- Aug' 07 3. various auto components.

## **Technical Skills**

- Python for DS & ML
  - Intermediate  $\bullet \bullet \bullet \bullet \bullet$
- Numpy, Pandas, Sklearn *Intermediate* • •
- Data Visualization,
  - Matplotlib, Seaborn *Intermediate* • • •
- PySpark
  - Intermediate • •
- Feature Engineering

  intermediate • •
- Statistics, EDA
  - Intermediate ••••
- NLP
  - Intermediate •••••
- AWS sagemaker
  - Beginner •••••
- Open CV
  - Beginner • •
- Neural Network
  - Intermediate ••••
- SQL
  - Beginner ••••
- BI Tools
  - Power BI, Tableau
  - Intermediate ••••
- Azure
  - Beginner • • •

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### **Projects Annexure**

## 1. Project :Dietary Assessment System for Elderly Persons using Deep Learning Techniques.

One of the architecture of deep learning which performs efficiently in Image classification is Convolution Neural Network (CNN).which learns higher order features through Convolution. The proposed system uses CNN trained and tested on fruits and breakfast database designed for an Indian Elderly Person which not only classifies the food but also recognize the nutrient content from a given food images

2. **Project : Customer churn analysis.** 

The main contribution of project is to develop a churn prediction model which assists to predict customers who are most likely subject to churn. The model was prepared and tested through Spark environment.

### 3. Project : Classification of Complaints.(NLP Project)

The target project of the is to classify the service request in different categories. Machine learning approach is used in this project Random forest classifier is used to classify the messages.

# 4. Project: To develop resampling of dataset for classification. algorithm.(Imbalance Data project)

Imbalanced datasets are those where there is a severe skew in the class distribution. This bias in the training dataset can influence many machine learning algorithms, leading some to ignore the minority class entirely. The two main approaches to randomly resampling an imbalanced dataset are to delete from the majority class, called under sampling, and to duplicate from the minority class, called oversampling. Random oversampling and Undersampling Imbalanced Datasets algorithm is used.

# 5. Project: Casting product image classification for quality inspection using Alex Net

The objective of this project is to automate the process of finding defects in the casting process. A casting Surface defect is an undesired irregularity in the metal product. Deep Learning Alex Net architecture is used to classify the image.

## Surface Roughness Prediction (Regression Project). Client: Inditech valves

The aim of the model is to predict Surface Roughness Prediction after burnishing process (One of the manufacturing process).

#### **Competition Participation**

 ${\bf 1. Food\ Demand\ Forecasting.\ XG\ Boost\ Linear\ Regression\ ML\ algorithm\ used}$  to predict the food demand

#### Following are capstone projects completed for learning.

Using the dataset from kaggle and other datasets sources.

- 1.Banking marking prediction.
- 2. Vaccination classification.
- 3.Spam and ham classification (NLP)
- 4. Phishing URL Detection with ML
- 5.Super market sales prediction.

## **Soft Skills**

Problem Solving, Critical Thinking

Expert • • • • •

Creative and Interpersonal Skills

Expert ••••

## Languages

**Business English** 

Expert • • • •

Marathi

Expert ••••

## Other details

Marital Status: Married

Address:

Urbangram, Kirkatwadi, Sinhgad Road. **Pune – 411024** 

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#### **Publications**

- 1 "Optimization Of Roller Burnishing Process Parameter On Cylindrical Surface On Aluminum Work Pieces", , International Journal of Engineering Sciences & Research Technology, Volume 4, Issue 5,May 2015.ISSN: 2277-9655
- 2 "Experimental Investigation of External Burnishing Process Parameters Surface on Cylindrical Work Piece Using Taguchi Approach", 2nd ICETSET-2018, IJMTE, Vol.8, Iss.ix, Sept 2018, pp.1868-1875. DOI: 16.10089.IJMTE.2018.V8I9.16.2219
- Abstract summarized in NDRF, Seminar Bangalore, May 2018 .Topic: Experimental Study of Residual Stress in Hard Turned Component.
- 4 "Design and Analysis of Hydraulic Press Machine Used for Gasket Cutting Application", ISSN (online): 2321-0613, International Journal for Scientific Research & Development.

## Training, Conferences, Workshops attended

- 1 Six Sigma for Teachers, Green Belt Level
- International Conference: "Nanocon 012 II nd" international conference on Nanotechnology Innovative materials, processes, product and application. At Bharti Vidyapeeth Deemed University, Pune.
- 2. State level workshop on "Optimization techniques with research perspective", at Pune, on 23-24 Dec, 2016.

#### Academics

Aug '11 - Master of Technology (M.Tech In Mechanical)

Oct'15 BHARATI VIDYAPEETH DEEMED UNIVERSITY, PUNE

Jul'2000— B.E. in Production Engineering

May'03 SWAMI RAMANAND MARATHWADA UNIVERSITY,NANDED

### **Certifications and Awards**

#### **Certified Data Scientist**

International Association of Business Analytics (IABAC)

June -Sept '20

- 1. Introduction to Data Science in Python.
- 2. Introduction to Applied Machine Learning
- 3. Python Basics

## **Personal Information**

#### **Email**

ashwinbj@gmail.com

#### **Phone**

+91 8329172426

#### Linkedin

https://www.linkedin.com/in/ashwin-joshi-6003997/

## **Interests**

Music, Cricket, Training