Puran J Singh
FL No B-505, ARV Imperia, Cell: 8793368806, 7020998539
Pisoli, Pune, Maharashtra Email:puranjsingh@gmail.com

Summary

Software Professional, having an experience of more than 6 years in Software Project Development and training and 3 years in Machine Learning.

Skills

Python, R, Data analytics, Machine Learning, Statistical Analysis, Statistical Modeling ,Predictive Modeling, Data science toolkits: such as NumPy, SciPy, Matplotlib, Pandas and Scikit-Learn , keras (the deep learning library), Data visualization tools: such as Matplotlib, Seaborn, plotly, GGplot. Core Java (basic), C programming.

Certificates

1: Data Analytics using R, from IIT Kharagpur.
It was a 60 hours course. In this course different statistical concept related to Data analytics & Machine learning with Lab implementation was completed.

2: Machine Learning by Andrew Ng, Stanford University from Coursera.
It was a four month graded course. In this course all the Machine learning concept with graded assignment was completed. Such as Linear Regression Analysis, Logistics Regression, Neural Networks with multi-class Classification, SVM, Unsupervised Learning, PCA, K- Means Clustering, Anomaly Detection, Recommender System.

Education

Qualification	Institute/Organization	Year	Percentage / CGPA
M.Tech (Computer)	National Institute of Technology Karnataka, Surathkal	2008	7.53/10 **CGPA**
M.Sc.(Mathematics)	D.S.B. Campus, Nainital, Uttarakhand	2004	65.6%
B.Sc. (Mathematics)	D.S.B. Campus, Nainital, Uttarakhand	2002	56.89%
H. S. C. (10+2)	Government Inter college	1999	65.6%
S. S. C(10)	Government Inter college	1997	64.33%
GATE-2006 (Maths)	All India Rank - 41	2006	

Total Work Experience: 9 years

Present Professional Experience:

- VIT , Pune Since July 2011 – till Date
- **Role : Data Scientist**

Previous Professional Experience :

- MGM , Aurangabad Since July 2009 – June 2011
- **Role : Trainer**

Projects:

1. Sentimental Analysis of Reviews and Ratings using Predictive Modeling& Text Analysis:

Technology	Python
Client	Consultancy Project (Hidden)
Duration	August 2017 – Till Date. (Ongoing project)
Role:	Team Lead

It is a review and rating predictive system. This system is build based on text analysis. To build the model, I have used **Machine learning model like multinomial naive bayes classifier, Random forest, and** NLP concepts like TFIDF, Countvectorizer, N-gram modelling, stemming and lemmatization, Entity extraction, sentiment mining using Python.

It is a supervised learning Model. We need to build the model and train using the training data. Trained model can be used for predicting the future Sentiments and rating.

Responsibilities:

- Requirement gathering and analysis for the project.
- Data Collection.
- Data Preprocessing using Pandas such as Data Cleanup, Feature Scaling & Normalization.
- Feature extraction & making Bag of word using Countvectorizer & TFIDF.
- Model building, Analyzing & Deploying.

2. Heart Disease Prediction Model Using Support Vector Machine & Decision Tree:

Technology	Python
Client	Part of Research Project
Duration	June 2018 – September 2018
Role:	Team Lead

The heart disease accounts to be the leading cause of death worldwide. It is difficult for medical practitioners to predict the heart attack as it is a complex task that requires experience and knowledge. The Coronary artery disease (CAD) is one of the most critical

Heart diseases which are statistically growing today. This system is build for predicting Artery diseases.
To build the model, I have used Different **Machine learning classification algorithm like SVM, Decision tree, Random forest & Artificial Neural Network.**
Principal component Analysis (PCA) is used for dimensionality reduction. It is a supervised learning Model. We need to build the model and train using the training data. Trained model is used for predicting Artery disease such as normal (No CAD) or Abnormal (CAD).
Finally, This I have implemented in Convolution neural network using keras (the deep learning library). Out of many optimizers, I used Adam, Adamax optimizer.

Responsibilities:

- Requirement gathering and analysis for the project.
- Data Collection (The heart disease data was collected from UCI Repository).
- Data preprocessing using Pandas & Scikit learn such as Data Cleanup, Feature Scaling & Normalization.
- Data Cleansing: Using Data Visualization tool such as Matplotlib and Seaborn, null value has been found out & treated. Using box plot outliers has been find out & eliminated.
- Model building, Testing & Analyzing model performance.

3. Recommender System of VOLP – Viswakama Online Learning Platform (Automation of Classroom Traditional Learning System)

Technology	Python, Core Java
Client	VIT, Pune
Duration	Dec 2016 – May 2017.

VOLP is online learning platform similar to Udemy, Coursera where college professor upload their course content and course videos and Student can enroll for the course and learn online. It's included with online examination and online grading system. In this project my role was to build a recommender system. To recommend the similar and top rated courses to the students.

A brief description of other projects:

4. Prediction Model using Regression Analysis Model (Housing prices)
Prediction Model such as Housing prices Prediction as per parameters, water flowing out from the dam as per change in water level.

5. Hand-written digits Recognition System
In this project we recognize hand-written digits using Neural networks & multi class classification Model.

6. Decision Boundary for Non Linear Data Using Support Vector Machine with Gaussian Kernel: Drawing Non linear decision Boundary for Non linear Curve using SVM (Gaussian Kernel)

7. Spam classifier System using Support Vector Machine

Classifying Spam mails using Support Vector Machine with Gaussian kernel.

8. Unsupervised Learning K-means clustering algorithm: Implementing K-means clustering algorithm to find different clusters of any given data. Using K-means clustering algorithm to compress an Image

9. Anomaly Detection System

Using anomaly detection algorithm, find anomaly in the system.

10. Movie Recommender System

To recommend high rated movies on the basis of user rating. This Algorithm works on Content based Collaborative filtering technique.

Personal Details

Marital Status	Married
Date of Birth	31/08/1982

Declaration:

I hereby declare that the above information is true to the best of my knowledge.

Puran Singh