

# TUSHAR GARG

Mob:88881 25091 • tusharcgarg@gmail.com • Pune, Maharashtra 411014 • 13/10/1978

---

## Career Objective:



Results-oriented professional with 20+ years of experience in Software development, IT infrastructure, and E2E Application Management. Seeking to leverage technical knowledge in Machine Learning, Artificial Intelligence and GENAI, coupled with leadership skills, to transition into a managerial role overseeing AI, ML and GENAI projects to drive innovation. Completed relevant certifications and recently proposed a RAG implementation to save 50% development efforts.



## Technical Skills

- **Languages/Frameworks:** Python, scikit-learn, Keras, Pytorch, SQL
- **ML:** Linear/Logistic Regression, Decision Trees, Random Forest, Boosting, SVM, Naive Bayes, KNN, PCA (Principle Component Analysis), K-Means Clustering, Hypothesis Testing, Model Validation.
- **Natural Language Processing:** NLP, Text Processing, Sentiment Analysis
- **Deep Learning:** ANN, CNN, RNNs (LSTM, GRU), SoM, RBM.
- **GENAI:** Autoencoders, RAG, LLMs, Transformers, Prompt Engineering
- **Tools/Platforms:** Pandas, NumPy, Matplotlib.

## Leadership Skills




- Team Leadership and Mentoring
- Project Management (Agile, Scrum)
- Cross-functional Team Collaboration.
- Stakeholder Communication.
- Strategic Planning and Road-map Development.

## Professional Experience

### VICE PRESIDENT

CITICORP SERVICES INDIA PVT. LTD. , Pune, MAHARASHTRA

November 2015 - Present

- Lead a team of 10-12 members and responsible for E2E management of vendor applications including development, security, Infra, upgrades and vulnerabilities, the applications used for corporate action and post trade compliance functions 
- As BlueOptima Productivity Champ, worked with 12 chosen applications within security services to streamline operations while increasing efficiency by 15% YoY.
- Provided leadership in key upgrades/migration projects by working with architects to implement new designs and solutions for efficient data retrieval and storage. 
- Managing Book of Work and Resource Planning with geographically dispersed team for applications under me.
- Propose a RAG implementation which would assist in project migrations. 
- Developed a Classification model for an internal hackathon using datasets from Kaggle.

### **ASSISTANT VICE PRESIDENT**

**BARCLAYS TECHNOLOGY, Pune, MAHARASHTRA**

**May 2013 - November 2015**

- Developed regulatory reports of FSA and SEBI regulators, and providing guidance on regulatory issues impacting the organization's operations.
- Designed static, instrument, and trades feeds for aiding the STAR DWH team in developing a strategic platform for Sophis (Equity Derivative Tool) decommission.
- Designed the solution for MFT (multi factored template) instrument which lead to correct regulatory reporting 

### **SENIOR ASSOCIATE**

**SAPIENT , Gurgaon, Haryana**

**May 2011 - May 2013**

- Developing automated solutions for EOD reconciliation process within ADM.
- Facilitated ARM (Automatic Release Management) through Bladelogic.

### **CONSULTANT**

**CAPGEMINI INDIA PVT. LTD. , Mumbai, MAHARASHTRA**

**May 2007 - May 2011**

- Worked as a lead designer in the project to integrate 3 UK banks and working on integration of HR and Sales systems.
- Implemented process improvements in managing the number recycling and number portability management systems for a Dutch telecom giant.

### **SOFTWARE DEVELOPER**


**HEXWARE TECHNOLOGIES PVT. LTD. , Mumbai, MAHARASHTRA**

**January 2004 - May 2007**

- Developed and maintained database/mainframe solutions around Demand forecasting, Bid Price Optimization, route generation and Allotment Manager Modules for clients of airline domain.

### **Self Learning AI/ML Projects**

- Amazon Sentiment analysis using NLTK.
  - Converted the dataset to countvectorizer and then classified the data using RandomForestClassifier
- Headline extraction model using Encoder Decoder architecture.
- Recommender System using RBM on Pytorch.
- Google Stock Price Prediction
  - Using LSTM and ADAM optimizer.
  - Minimizing loss using MSE.
- Image Classification of Documents using transfer learning.
  - Converted the images to data set using Keras
  - Retrained the Inceptionv3 model with the dataset and classified the documents .
- MNIST - Multiclass Classification With CNN (Keras).
  - Converted class vectors to binary class matrices

- Created the CNN module using 'Relu' activation for Inner layers and 'Softmax' for outer.
- Chatbox seq2seq using Keras
  - Created an encoder decoder model having embedding, dense and LSTM layers on a customized Q&A dataset
- House Price Prediction using Linear Regression 
  - Verified the assumptions of linear Regression and transformed the output variable (Log of Y).
  - Predicted the model using both statsmodel and sklearn.
- Credit Risk Analytics using Logistics Regression.
  - Perform Exploratory Data analysis to reduce variables using VIF, Somer D method.
  - Evaluated the model using the confusion matrix for optimal cut off.
- HR Analytics Decision Trees - Ensemble Learning
  - Build a Logistics Reg model first and then compare the O/p with the ensemble algorithms (decision tree, Bagging, Boosting and Random Forest)
- Bank Marketing Case Study using Naive Bayes and KNN
  - Performed EDA and introduced customized variables.
  - Performed RFE (Recursive Feature Elimination) to finalize variables.
  - Created and compared NB and KNN classification models with KNN being close to 90% accuracy.
- Credit Card segmentation
  - Perform EDA to identify new KPI's.
  - Identified the components using using PCA and feature analysis
  - Findings through clustering is validating Insights derived from KPI

## Education

### **Bachelor of Engineering in Computer Science**

**M.A.I.E.T., University of Rajasthan, Jaipur**

*June 2003*

## Certifications

- Advance Management Program for IT Professionals, IIM Kozhikode in 2023
- Machine Learning Certificate from Analytix Lab in 2020
- Project Management Professional by Princeton in 2012