

VISHVNATH KUMAR

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CAREER OBJECTIVE

With comprehensive knowledge of statistics and practical knowledge of statistical modeling, I aspire to pursue an enriching yet challenging career path and contribute significantly to the ongoing growth and development of the organization with the enthusiasm to serve with utmost dedication and commitment

EXECUTIVE SNAPSHOT

- ❖ Having 5 years of experience in the field of core analytics and advanced business analytics (Data Scientist) to build predictive frame work/ML to draw insight at scale for different aspects of business
- ❖ Developing and implementing advanced analytics approaches including statistical modeling, Artificial Intelligence and Machine Learning principles etc. to answer business question and drive actionable insights using R, Python and SAS
- ❖ Hands on experience in analytics – driving key business impact from data and creating algorithms, implementing and analytical solution based on analysis. With large, complex, structured and unstructured data sets to provide insights
- ❖ Analyzed business problems using data from different sources to provide strategic and actionable business insights
- ❖ Deep understanding of statistical modeling, machine learning/data mining concepts
- ❖ I have been working on different algorithms include **machine learning techniques, NLP (Natural Language Processing), OCR (Optical Character Recognition), Regression Modeling, Classification Modeling, Time Series Analysis, Segmentation & Cluster Analysis**
- ❖ Ability to work well under pressure and on multiple and conflicting priorities. Also, flexible to adapt changes quickly

WORK EXPERIENCE

Bank of America

[02nd August, 2017 – Present]

- ❖ Currently working as a part of **EIT – Analytics** which comes under **Operation**. We are called as a **second line of Defense**. Our primary work is to ensure or validate whether all the processes or Businesses are complying with Law, Rule or Regulation (LRR) using Data.

❖ **Trade Surveillance MRA Regression Model:**

- Built a regression model in trade surveillance space to predict number of trade alerts for which SLA will be breached
- Considered weekly data points of last 5 years with features escalation rate, Z score, Alert volume by regions and product wise
- It helps bank to take proactive approach and close the alerts before the deadline breach

❖ **Trended Prediction or Univariate Time Series Forecasting:**

- Built an univariate time series forecasting model to forecast next month alert volume
- Identified MA and AR order by computing and plotting autocorrelation and partial autocorrelation
- Used simple exponential smoothing method of forecasting
- It helps bank to take proactive approach if the predicted alert volume is very high as compared to existing historical trend

❖ **EIT Test Re – Engineering:**

- Re – designing the existing test and predict failure of the test using AI/ML
- Generate key learning relative to the use of AI/ML to significantly improve the efficiency of automating tests
- Capture learning as a set of essential building blocks for future project related to AI/ML use in test automation

❖ **Thematic Analysis:** Developed a tool which is based on **R** to map **Controls** of new **Issues/Risks**

- Built a framework using similarity measure **levenshtein distance** to map various issues/Risks with their respective controls
- Deployed above model in production environment

❖ **DCP Automation Tool:** Developed an automated tool for Document Reconciliation

- Extracting data from various **disparate sources** (SQL database, SharePoint, Share Drive etc) and various file formats like PDF, Docs, excel etc automatically.
- Comparing information from various documents and reporting the percentage of unmatched information in an automated fashion.
- Exporting the result in any format Viz. Excel, CSV, Text, Share drive, Share point or SQL Database

❖ **Test Automation in Trifacta:** Automating all active **5000+** tests using **Trifacta** Data Wrangling Tool and trying to achieve Bank vision “**Test Everything Everyday**”.

- End to end automation of **sampling and Testing** process
- End result as Dashboard in **Tableau**

- ❖ worked as a **Business Analyst** for **Marketing Analytics & Reporting** team which comes under **Operation**
- ❖ **Global Voluntary Lapse Model:**
 - Built a classification model and used Logistic Regression to predict probability of churn out of customer at the end of year
 - Considered one year full data with features socio economic, demographic, risk adjustment factor and penetration variables
 - It helped organization to retain those customers whose probability of churn out is very high
- ❖ **Campaign Effectiveness:**
 - **A Direct Comparison** considering various matrices like **subsequent Calls, Grievances, Voluntary Lapse, KMI/NPS, UES etcetera** between two different groups, one on which the program has been run and it was not run for other, to check whether a particular **healthcare Campaign** is effective to derive better member experience or not.
 - Used **Logistic regression** and **Poisson regression** modeling approach with **clustering** technique to assess the member experience of **health care campaigns**.
- ❖ **NLP (Text Mining):** Developed analytics framework for **Sentiment Analysis, Topic Modeling** and **Link Analysis** for KMI survey feedback data, which helped converting detractor population into promoter.

Worked as a **Statistical analyst** and enhanced product by developing (from designing algorithm to coding) few key performance indicators which helps to solve critical business problems of client

- ❖ **Loss – gain prediction:** A project considering manufacturing data to forecast average loss gain conversion cost during manufacturing process
 - Used Time series analysis in **R** to forecast the next hour loss – gain and also found the reason behind it by identifying critical parameter
 - Used **Benchmarking** to find the optimal range of Parameters and KPI
- ❖ **Generic Regression Model:** Built a library for various regression models which works almost all types of data.
 - Linear Regression , Generalized linear Regression, Stepwise Regression, Subset Regression, Ridge Regression, Lasso , Linear mixed effect Regression, Generalized linear mixed effect Regression, Non parametric Regression etc
 - Developed an **User Interface** (Dashboard) for all types of Regression using **R**

EDUCATIONAL QUALIFICATION

Examination	University	Institute	Year	CPI/%
Post Graduation (Applied Statistics and Informatics)	IIT Bombay	IIT Bombay	2015	7.60
Graduation (B.Sc. Statistics)	Delhi University	Kirori Mal College	2013	84.12
Intermediate/+2	BSEB	College of commerce Patna	2009	79.60
Matriculation	BSEB	Ram Babu High School	2007	80.20

TECHNICAL SKILLS

- ❖ **Trifacta Wrangler** certified
- ❖ **Programming languages:** C, R, Python
- ❖ **Software Packages:** SAS, SPSS, Trifacta, Latex , DataRobot
- ❖ **Microsoft Office:** MS Excel, MS Word, MS PowerPoint

TOPICS OF INTEREST

Machine Learning	Artificial Intelligence	Natural Language Processing (NLP)
Regression Analysis	Data Structure & Algorithm	Time Series Analysis

POSITION OF RESPONSIBILITY

- ❖ **Class Representative**, Applied Statistics and Informatics, IIT Bombay
- ❖ **Leader of Logistic Team** Mathematics Olympiad
- ❖ **Coordinator**, Howzzattt Cricket Tournament at Kirori Mal College, **Delhi University**
- ❖ **Member of the Gender Sensitization Committee** Kirori Mal College, **Delhi University**

EXTRACURRICULAR ACTIVITIES AND ACHIEVEMENTS

- ❖ Provide trainings across pan India location of Bank of America on Emerging Technologies like AI & ML
- ❖ Received **Gold Award** for exemplary contribution in the Text Mining project and DCP Automation tool at Bank of America
- ❖ Received **Bravo award** for innovative and exceptional work at United Health Group
- ❖ Received **Team Excellence Award** for working efficiently in the team at United Health Group
- ❖ Secured **3rd Position (out of 300+ students)** in University of Delhi