

About Me

- Senior Data Scientist at Cognizant having 8 years of rich analytics experience.
- Responsible for providing end to end analytical solutions from gathering client requirements, understanding opportunities for analytical solutions, designing solution pipeline and communicating solution in a non-technical way.
- Expert in providing analytical solutions using combinations of wide array of tools and languages as per client requirement.
- Successfully delivered numerous use-cases on algorithms like Regression, Classification & Natural Language Processing for divisions like Campaigns, Marketing, Retail and HR.

Technical Skills

- Python / R / Scala/ PL-SQL
- Oracle DB / MS SQL Server / Netezza
- HTML,CSS, JavaScript, Vue.js
- Tableau/ Microsoft Power-BI
- SPSS Modeler & C&DS
- Linux 7.2

Work Experience

Senior Data Scientist at Cognizant Technology Solutions

June 2016 – Current (2 Years 9 Months)

Job Role

1. Gathered Requirement for analytical needs, designed solution pipeline, built project estimates and delivered Data Science solutions.
2. Liaison with client to update the progress of project and finally present solution to technical experts and business audience
3. Drafted automated solution flow and productionize using blend of tools like SQL, Python, R, SPSS & Tableau.
4. Built front end applications using R-shiny and Python (TkInter).
5. Built Excel simulators as prototype to showcase insights of Data Science using Slicer, macros & charts
6. Built Single Page Web Applications (website) for ML solution orchestration using Vue.js frameworks, Google Firestore & Github.
7. Provided trainings and presentations in technical topics to client or reporting team members
8. Built POC for innovative solutions using latest ML techniques
9. Conducted technical interviews to screen candidates for Data Science Team

Projects

1. **Document Similarity - Identifying most similar ticket (from a corpus of previously solved tickets) for any new ticket.**
Ticket corpus is processed using relevant text cleaning steps to create numerical representation of documents as tf-idf. Rank tickets in the corpus by finding similarity to the asked ticket using various algorithms like Cosine Similarity, Word2Vec, Levenshtein/Edit Distance and sysnet(word-net) distance.
2. **Propensity Models- Optimize campaigns by targeting customer where campaign effectiveness is maximum.**
Build customer propensity models (Probability to buy again) for different product lines based on past customer purchase patterns. Transformed sales transactions into customer KPI's and fitted supervised classification models. Used net-uplift modeling (AB Testing) technique to identify decile which are most responsive to campaigns thus maximized campaign ROI. Using Tableau, we tracked live model performance on various metrics like AU-ROC, Confusion Matrix metrics like Precision, Recall, Accuracy & F1-score.
3. **SKU Optimization Tool- Identify optimal no of SKU's for each product cluster by statistically trimming portfolio using historical data.**
Using historical Range-Width (SKU Counts) & respective efficiency for each cluster we built optimization tool which simulate optimum Range-width and let business analyst to select optimum Range-width where cannibalization is minimum in a cluster. Using python built application which helps business to merge strategic decisions and Statistics to optimize Range-Width for each cluster.
4. **Recommendation Model- Find association rules over transactions to determine different product combinations bought together.**
Transactional data is transformed into customer level with flag variables which can be fed into Apriori Algorithm to identify association rules. By iteratively selecting different parameters like support, confidence and lift we obtained the best model to suit business requirement and then make suggestions at customer level.
5. **Price Elasticity model - Identify utilities/importance of product feature & feature-levels.**
We fitted choice model to sales data to gauge price & feature elasticity which customer attaches for a product line while making purchase decision. This helps to gauge trade-off between product features and pricing thus helps refine Product design and Product pricing. To do this each customer transactions is converted into "choices/alternatives panel" which is available for customer during a purchases. Then Choice Model Algorithm (A Bayesian Hierarchical Model) is fitted to obtain feature importance (r-betas).

Senior Analyst (Sales Forecasting) at Mobily Info-Tech

Sep 2013 – Jun'2016 (2 years 10 Months)

Job Role

1. Gathered Requirement for analytical needs, designed solution pipeline, built project estimates and delivered Data Science solutions.
2. Identified tools/techniques to solve business problem using machine learning and implemented use-cases accordingly.
3. Built/Maintained/owned system (database, tables etc) to provide effective analytics solutions for different business divisions.
4. Identified scope of automation within existing architecture to reduce turnaround time for any ad-hoc analytical requirement.
5. Built Excel based simulator to provide complex solutions for Retail and Franchise commission requirements.

Projects

1. **Text Mining of Tweets and SMS– Text mining of product Tweets & SMS to identify sentiment and product category**
Along with standard Text mining steps we applied steps like Emoji Removal, Language Translation, Spelling Correction, Acronyms & abbreviation expansion, repeating character standardization. Built parsers for product/Service identification which in turn is used along with Sentiment Score to gauge issues and track performance in Tableau dashboard.
2. **NLP Classification modeling – Predict Job-Role from textual information present in Job Description.**
Build multi-class classifier (25 classes) models on Text data using NLP techniques in Python. Post Text-cleaning, custom built NER (Named-entity recognition) which is applied to retain only skills as Model features for stable and robust modeling. Per class evaluation metrics are tuned by iteratively refining the predictors and effective model hyper-parameterization
3. **Sales Forecasting - Forecast next 1 month sales for each retail stores using Apache Spark**
Built Regression models to forecast sales for retail stores accounting non-time series predictors like Promotional activity, Activation Periods, holidays, Store type, competitor KPI in model. Using Apache Zeppelin we fitted ML model in Spark Frame work as a scalable solution.
4. **Churn prediction – Built model to predict customers with a high propensity to churn.**
We used survival analysis to deduce churn definition for non-contractual customer for different categories. Using state of art classifiers like random forest and SVM we fitted classification models to accurately predict the propensity to churn. We then categorized customers into risk & cost matrix to define differential strategy to minimize Revenue Loss & maximize CLTV using various engagement techniques.

Senior Analyst (Sales and Marketing) at Ascend Tele-Infra

Jun 2011 –Sep 2013 (2 years 4 months)

Job Role

1. Lead team of management trainees to track/maintain/own sales-orders, sales & collections data of whole company.
2. Performed reporting, visualization and analysis of sales and marketing data at corporate level for operational tracking.
3. Built annual operating plan using internal and external data on which annual sales and incentive plan established.
4. Delivered many operational analysis to management as well as business partners.

Projects

1. **Descriptive Analysis:** - Analyzed sales and collection databases to generate outstanding analysis (accounts receivables) for different Tele-communications partnered with our firm to drive sales. Also built and maintained various strategic dashboards to track sales pipeline and collection performance at various level (corporate/State/Cluster). Overhauled existing analytical architecture to fully automated dashboards and reports using combination of tools like Excel, MS-SQL Server, Tableau & Power-BI.
2. **Sales & Collection Analysis:** - Reconciled collections with bills to track performance of sales team on daily basis using various trackers. Also maintained Sales Orders & Sales pipeline (tracker) as a part of Operational BI. It constitutes multiple operational task of quality check using Geo-Spatial Analysis, MSA (master sales agreements) compliance and liaison with Departments like Projects and Finance.
3. **Business Analysis & Reporting** – Built top quality monthly Business decks of Sales and Marketing division to be presented to Marketing head and Investors

Education

Title	Institution	Passing Month-Year
Wiley Certification – ML & Big Data	INSOFE 3 Months Course on Job training on ML & Big Data	Sep'16
MBA - Marketing	BIM (Bharathidasan Institute of Management) -Trichy	Jul'10
Degree – B.Sc.	Govt. Degree College - Himachal Pradesh	Mar'08

Miscellaneous Info

Current Salary	13.2 (1 variable) Lakhs (Last hike Jun'18)
Expected Salary & Role	18.5 Lakhs (40%) and Lead Role
Notice Period	60 Days (Non- Negotiable)
Preferred Location	Bangalore, Pune, Hyderabad