Well versed data scientist with a vast variety of domain knowledge. Love to solve complex business problems by utilizing data-driven analytical approach.

# Skill & Technical Expertise:

**Statistics -** Descriptive & Inferential Statistics, Probability Theory, Statistical & Predictive Modelling

**Machine Learning –** Linear/Non-Linear Methods, Tree based, Bayesian approach, Boosting and GLM Algorithms

**Timeseries Analysis –** Univariate, Multivariate, Structural

**Deep Learning –** CNN, YOLO, RNN, LSTM, Auto-encoders

**NLP -** Text Analytics, Tf-Idf and, Word Embeddings

**Data Analysis –**Tableau and Power BI

**Cloud –** **Azure:** ML, Databricks, MLOps, **AWS:** S3, EC2, Sage Maker

**Language and Frameworks –** Python, R, PySpark, TensorFlow, Keras, MLFlow, RESTful APIs

**Databases –** SQL, NoSQL

# Education & Certification:

**Bachelor of Technology –** Visveswaraya Technical University, Bangalore **|** Computer Science **|** 2012-2016

**2nd PUC -** M.G.M. Senior Secondary School, Bhilai | 2010- 2012

# **Experience:**

## Abinbev| Lead Data Scientist Aug 2022 – Present

* Led the global forecasting team to develop the demand forecasting model at Planning Item level for 50+ Market across the globe.
* Created a forecasting product which encompasses of 100+ technique and automates the end-to-end process, from data analysis to predictive modeling
* Developed Gen AI POC’s to automate the traditional manual task and improve cost efficiency.

## Affine Analytics | Data Science Consultant Sept 2019 – Aug 2022

* Initiated and led an R&D program for developing predictive models, DL & NLP related problems for upcoming client POC's and onboarded multiple big market giants
* Ensured account growth by regularly interacting with client to understand the business prospects, opportunities & challenges
* Authored a whitepaper ([link](https://affine.ai/whitepaper-post/business-impacts-of-covid-19-on-production-manufacturing/)) to understand the business impact of covid-19 in Production & Manufacturing and utilized this learning for multiple Fortune 500 clients of Affine Analytics
* Improved performance of multiple AI/ML models by including modern state of art methods & Bayesian approach
* Mentored analyst & Senior Analysts across organization for ML/DL practice. Upskilled & utilized them in various ongoing and new accounts

## Mindtree | Senior Engineer – Data Science Jan 2017 – Sept 2019

* Collaborated on Research program at Mindtree Research Team (COE) to build upcoming Product demos and based on that won multiple client projects including fortune 500 clients
* Worked under Math’s world, an advanced mathematics team to implement a complex solution using pure mathematics concept
* Improved actionability & validity of internal assets for the retail domain
* Implemented scalable Machine learning models and deployed them in the cloud architecture

# **Relevant Client Projects:**

## Demand Forecasting | No.1 Spirit Manufacturer in the World Affine Analytics

**Problem:** Facilitate budget allocation decisions by forecasting beer volume demand across the globe to estimate the Profit and loss metrics and subsequently gross revenue

**Approach:** Applied Classical and Modern (Structural) Bayesian Time series approach to forecast the volume by integrating Covid-19 pandemic effect, economic trends & seasonality. Lead a team of 5 and drove complete engagement from the scratch and successfully delivered it with 95% accuracy rate

## Market Mix Model | Biggest Retail Store chain, USA Affine Analytics

**Problem:** Optimize the marketing spend by various media channels & strategize the budget allocation

**Approach:** Designed &leveraged a linear regression model to form a parametric equation between sales & marketing spends. Derived an approach to calculate the contribution of each of the media channels and optimized it by calculating optimal ROI. ~3% revenue upside noted in next quarter post implementation

## Price Elasticity | Top Movie Production Company, USA Affine Analytics

**Problem:** Obtain an optimal price point for the retail product that accounts the market competitors and lift the ROI

**Approach:** Created 5-10% ROI uplift using an innovative Cross Price Elasticity Model and constrained price optimization framework for a leading Movie studio across different release format in the USA region

## Media Recommendation | Media Ad Company, India Mindtree Ltd.

**Problem:** Personalized media recommendation in the OTT based platform based on the user past selection

**Approach:** Interacted with various stakeholders to narrow down the exact requirement & brainstormed same to the offshore team. Designed & implemented a hybrid recommendation engine by using content base, collaborative filtering, and a popularity-based model. Engaged with client in defining go-to market strategy for additional media content.

## Object Detection & Sentiment Calculation Mindtree Ltd.

**Problem:** Scrape product bottle images data from the social media platform and detect the sentiment of customers based on the bottle photo quality

**Approach:** Used Object detection methods to detect the object and then classified based on the classifier. Post that, based on the classification ratio derived the sentiment of the customer

# **Blogs & White Paper:**

* White Paper – [Business Impact of Covid-19 in Production & Manufacturing](https://affine.ai/business-impacts-of-covid-19-on-production-manufacturing/)
* Blog on [Market Mix Model – what drives your ROI?](https://affine.ai/marketing-mix-modelling-what-drives-your-roi/)
* Blog on [Price Elasticity: How vulnerable is your product in the market](https://affine.ai/price-elasticity-how-vulnerable-is-your-product-in-the-market/)
* Blog on [Hypothesis testing in Machine Learning using Python](https://towardsdatascience.com/hypothesis-testing-in-machine-learning-using-python-a0dc89e169ce)
* Blog on [Machine learning at scale using data bricks, PySpark and MLFlow](https://medium.com/analytics-vidhya/machine-learning-at-scale-using-pyspark-deployement-using-flask-3bad70e97165)

# **Other Interests:**

* GitHub contributor
* Kaggle Member & Tech Blog writing
* Biking, Reading, Share Market

# **Language:**

**Language** – Hindi & English(Full professional proficiency)