📞 kumara.vathadi@gmail.com
✉ +91–96666 05244
📍 Hyderabad
🔗 vksvarma.github.io

Kumara Vathadi
Senior Data Analyst – Tiger Analytics | MTech – IIT Madras

Professional Summary

3+ years of professional experience in various technologies of data science (statistics, data analysis, machine Learning, optimization), data engineering (Apache spark, Docker, Kubernetes) and 2 years of Research experience (Master's) in Deep Learning. I am quick learner, adaptable, self-motivated and mentally consistent in planning and organizing my abilities for taking result-oriented decisions. Looking forward to work on large scale Production environments and challenging tasks to enhance my skills and knowledge.

Skills

Key Skills : Machine Learning, Deep Learning, MLOps, Modelling – Development, Management, Monitoring
Programming Languages: C++, Python, R, SQL
Libraries/Frameworks. : NumPy, Pandas, Matplotlib, Scikit-learn, Pyspark, Spark MLib, TensorFlow, MLFlow, Transformers
Cloud : Azure Databricks, Azure Devops, Azure Kubernetes, Azure DataLake, AWS EC2
Other Skills : Agile, Git, Docker, Power BI, Advanced Excel

Professional Experience

Senior Data Analyst, Tiger Analytics   Oct'2020 – Present
-Proficient in working on end-to-end data science pipeline to develop solutions for the business problems.   Hyderabad, India
Skills & Tools: Data Science – Python| R | SQL | Machine Learning (Lasso, Bayesian, Market Mixed Modelling) | Optimization
          Data Engineering – Docker Containerization | Azure Kubernetes Services
          Big Data – Pyspark | Azure Databricks

Roles & Responsibilities:

- Lead the team of 4 members on developing and delivery of predictive analytical solutions to the client in the retailer analytics domain.
- Responsible for scoping of data science problem, data collection, exploratory data analysis, model development, dashboard development, user acceptance testing and deployment of dashboard on client network.
- Designed, Developed and productionized the **Business Planning Optimization Tool** that allows retail managers to understand the effectiveness of prior promotional plans and refine future pricing & promotional plan and post event analysis.
- Designed and Implemented **Power BI Dashboard** to track historical trade promotional activities and their contribution to sales, lift and cannibalization.
- Deployed and Integrated large-scale pipelines with a distributed processing platform of spark in Azure Databricks
- Worked actively on various techniques of feature selection, feature engineering and modelling for e-commerce and brick & mortar data.
- Build and Deployed CI/CD pipelines for web applications in Azure Devops using Docker Containerization and scaled them using Kubernetes Orchestration.

Professional Projects

Price Elasticity Models on Retailer POS Data & E-commerce Data.   **Tiger Analytics**

- Build statistical price elasticity models for **7000**+ products across **40**+ Retailers and **1000**+ products across **2** Ecommerce websites in US Market for one of the Top CPG pet products client.
- Executed **Hierarchical Bayesian Regression** on those products where priors are calculated by applying **Lasso Regression** on 5 intervals of historical data.
- Segregated the models based on performance metrics of **Rsq** and **MAPE** and calculated baseline sales, gross lift, cannibalization metrics as insights and automated & parallelized entire process and reduced the **80**% modelling time.
- Developed a framework for new products launches into the market by using **linear mixed effect modelling**.
- Build and deployed price & promotional optimization frameworks by including different business level constraints.
- Deployed models into AKS enabled business planning optimization angular tool.

Data Processing Pipelines in Apache spark in Databricks for power BI Dashboard   **Tiger Analytics**

- Implemented Data pipelines in Databricks using **Pyspark** to process POS streaming data.
- Build and developed scoring module to provide trade promotional activities summary and insights by using price elasticity models and POS streaming data.
- Integrated scoring module, data pipelines to automatically update the power BI Dashboard in weekly manner using CI/CD pipelines of Azure Devops.

Damage Identification on Composite structure using Convolutional Neural Network   **M. Tech Thesis**

- Developed a predictive model to identify the damage on composite structure. A deep convolutional neural network (CNN) architecture is developed by using experimental data and simulation data.
- Build another model to identify the static deflection of the structure using **Support vector machine**, **Random Forest regressor** with 98% variance explained.

Achievements

- Secured All India Rank 2014 in Graduate Aptitude Test in Engineering (**GATE-2018**) out of 0.2 million aspirants.
- Received an International Honorable mention price by **NASA** in Space Settlement Design Contest.

Education

Master of Technology, Computational Mechanics   2018 – 2020
CGPA: 8.99/10, Indian Institute of Technology- Madras (IIT-M)   Chennai, India
Bachelor of Technology, Mechanical Engineering   2013 – 2017
CGPA: 8.92/10, Rajiv Gandhi University of Knowledge and Technologies – Nuzvid   Nuzvid, India

Courses

- Computational Methods
- Analytical Methods
- Machine Learning
- Deep Learning Specialization

Hobbies

- Travel
- Reading
- Badminton
- Movies