

# KASTHURI (KASY) VISWANATHAN

## STRENGTHS

### ★ Sales Growth

Delivered 30% YoY sales growth by targeted customer identification using segmentation models and Churn models

### 💎 AI based Improved Customer retention model

Developed and implemented models that reduced Churn

### 🗣️ Team Leadership

Led and trained a high-performing advanced analytics team of 7 + members

### 🚩 Strategic Planning

Developed and executed ML based Drug Purchase plan that saved over 20% YoY

## PATENT PENDING

### 🏆 Patents

Inventor of 4 pending U.S. Utility Patent Filed

· Artificial Intelligence Applications of Non-Linear Optimized Multi-Layer Decision Forest and Non-Parametric Studies.

· Adaptive Robust Multi-Layer Non-Parametric Machine Learning Algorithm

· Molecular Network Risk Score Prediction Algorithm

· Methods and Composition for Detecting Hereditary Cancers

## TRAINING / COURSES

IBMI Program Certificate in Project Management

IBMI Program Certificate in Strategic Management

## SENIOR DATA SCIENCE ADVISOR (Principal)

📞 214 600 9871 @ itzkasthuri@gmail.com

🌐 <https://www.linkedin.com/in/itzkasthuri/> 📍 Dallas, Texas

## PROFESSIONAL SUMMARY

- Results-oriented and strategic-minded Data Science leader with a proven track record of driving business success through the effective utilization of data-driven insights.
- 15 years of experience in multiple disciplines of data science, marketing, digital and user experience, medical claims, product design, strategic planning, research, and business analytics.
- Results-driven Data Scientist with hands on expertise with model development and deployment. Strong knowledge of **ML, NLP, Deep Learning, Knowledge Graphs** and have experience working with massive amounts of data.
- Worked on Deep Learning models like **CNN, RNN and NLP (BERT) for solving various business use cases like name entity resolution, forecasting and anomaly detection.**
- Effective communicator, storyteller, and influencer through visualization techniques and appropriate language for the general audience, scientists, internal and external partners, and executives.
- Have a strong curiosity for data and a proven track record of successfully applying rigorous scientific methods with proficiency in ML Engineering and DevOps capabilities.
- Expertise with **Python, PySpark, DL frameworks like TensorFlow and MLOps.**
- Good Knowledge of insurance policies, six sigma principles, strategic operations and regulations, and industry trends related to claims processing and insurance.

## EXPERIENCE

### Senior Data Scientist (Principal)

2020 - Present

#### Express Scripts, CIGNA

Texas

- Develop and execute a long-term vision and strategy for various projects encompassing **supply chain, survey analytics, marketing, digital/user experience, and Rx Factors at Cigna Express Scripts.**
- Developed machine learning algorithm that improved customer churn prediction accuracy by 20%, resulting in a reduction in customer attrition and increased customer retention rates.
- **Successfully lead and deliver large-scale projects, generating over \$120M in revenue** for Cigna operations, consistently achieving project goals and surpassing operational expectations.
- **Architecting and designing data implementation patterns and engineered solutions using native cloud capabilities.**
- Achieved a significant 50% improvement in campaign performance.
- Collaborate closely with senior leadership to develop and implement an effective digital marketing strategy, leading to the identification and implementation of innovative tactics.

### Senior Data Scientist and Portfolio Manager

2019 - 2020

#### Ayass Bioscience LLC

Frisco, Texas

- Implement A/B testing methodologies and assess customer retention, brand awareness, and global expansion strategies, resulting in informed decision-making and improved campaign performance.
- Utilize advanced statistical analysis techniques to create comprehensive reports and data visualizations, providing valuable insights for more than 20 marketing campaigns and initiatives.
- Implemented a **BERT BASED (NLP) model to analyze customer feedback, resulting in a 30% improvement in sentiment analysis accuracy** and valuable insights for product improvement.
- Leading data warehouse team and leads in creation of cloud data warehouse plans, roadmap, success metrics, and assessment of client's enterprise (on-premise and on-cloud) data systems.
- Creating robust relationships with business stakeholders and ability to act as a trusted advisor to client leaders.
- Worked in collaborative development environment (**GIT, Azure DevOps, JIRA**).
- Achieved technical excellence by advocating for and adhering to lean-agile engineering principles and practices such as API-first design, simple design, continuous integration, version control, and automated testing

## TECH STACK

Python, R, SQL, Java ·

Pandas, NumPy, dplyr, SQL · Teradata ·

MongoDB · NLTK · spaCy · Gensim ·

Spark · Hadoop. MLOps ·

Scikit-learn, TensorFlow, Keras · GPT ·

VAE · GANs · LLMs · AIOps · GPT · LLaMA ·

LaMDA · Matplotlib, Seaborn, Plotly ·

Tableau · Alteryx ·

Apache Spark, Hadoop · RNN · GAN CNN ·

AWS · GCP · GITHUB · BITBUCKET ·

DOCKER · KUBERNETES ·

A/B Testing ARIMA PROPHET

## SKILLS

Independent Contributor ·

Team leader. Data Strategist. · Six Sigma ·

Presentation Skills · Machine learning ·

Deep learning · Advanced NLP ·

Predictive models

## ACHIEVEMENTS

### ★ Business Growth

Built a model for shipping RFP that resulted in effective shipping of 60 Million packages through major shipping corporations

### 🏆 Product Launch

Successfully launched NLP based classifier resulting in a 25% reduction in call volume

## PUBLICATIONS

### Publications

<https://www.researchgate.net/search/publication?q=kasthuribai+viswanathan>

## EXPERIENCE

### Bioinformatics Data Scientist

2017 - 2019

#### Ayass Bioscience LLC

Frisco, Texas

- **Enhanced Predictive Models: Developed advanced predictive models that improved accuracy by 15% compared to previous models.**
- Transformed complex data into easy-to-understand formats, collaborating with external scientists and driving business improvement.
- Product data Analytics on evaluating product iterations or experiments; understanding and tracking customer and **user behavior using lenses like adoption, churn, cohorts and funnel analysis**
- Independently contributed to development and deployment of various machine learning models.
- Led team of Advanced Analytics to aggressively expand customer base resulting in a **30% increase in customer acquisition pipeline.**
- Use data analytics to develop, populate, and analyze dashboards for transparent, real-time project, program, and portfolio measurement results and metrics.
- Develop data ingestion frameworks, real-time processing solutions, and data processing/transformation frameworks, leveraging open-source tools.

### Senior Computational Biologist

2010 - 2017

#### UTSouthwestern Medical Center

Dallas, Texas

- Managed a team of 3 data analyst and acted as principal contributor to AI/ML Platform that integrated with Legacy production.
- Performed all aspects of study site management including qualification, initiation routine
- Delivered **Interactive visualizations/dashboards using ggplot and Tableau** to present analysis outcomes in terms of patterns, anomalies, and predictions.
- Conducted research to stay up to date with the latest advancements in Generative AI, machine learning, and deep learning techniques, and identify opportunities for integrating them to get research publications.
- Developed and implemented machine learning models for anomaly detection, root cause analysis, leveraging both **supervised and unsupervised learning techniques.**
- **Demonstrated knowledge of medical coding practices and processes (ICD-9/10 and CPT/HCPS).**
- Testing and validating all AI methods. Deploy and manage models throughout the end to end lifecycle.
- Have worked on all steps required to bring an AI/ML model to production – **from ideation to deployment**

### Senior Data Analyst

2007 - 2010

#### IITH and Serendio Innovations

India

- Designed, modeled, validated, and tested statistical algorithms against various data sets including behavioral data and deployed predictive models.
- Building and prioritizing backlog for graph theory based machine-learning enabled features to support client business processes.
- Designed and implemented a data pipeline that automated data collection, cleansing, and transformation processes, reducing data processing time by 30% and improving data quality.
- **Performed Data Transformation method for Rescaling and Normalizing variables.**
- Developed software using Java, Python in client/server and web applications: **BIOASK - Knowledge Discovery Suite (Literature Mining Engine).**
- **Performed Text Mining using NLP and Machine Learning techniques and Ontology Curation.**
- Designed structured process improvement workflow and automation.

## EDUCATION

### Masters in Bioinformatics and Data Analytics

#### Johns Hopkins University

Bethesda, Maryland

### Bachelors of Technology

#### SASTRA Deemed University

India