

Hamsha Satish Kumar

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Data practitioner, passionate about learning and solving problems using data to provide actionable insights, drive business growth, and enhance the customer experience. 3+ years of industry experience building production-grade Machine Learning solutions across diverse domains. A continuous learner with comprehensive know-how of data engineering, IT infrastructure, and model deployment.

EDUCATION

The University of Texas at Dallas	05/23
Master of Science, Business Analytics (Data Science specialization)	
PSG College of Technology, Coimbatore	05/18
Bachelor of Engineering, Electronics and Communication Engineering Distinction with first-class	

TECHNICAL SKILLS

Languages: Python, R, SQL, SAS, Advanced SQL, C, C++, HTML, CSS, JavaScript, Bash

Big Data Tools: Druid, Scala, Apache Spark, Hadoop, ETL, ElasticSearch, Kafka, Cassandra, Pig, Impala, MapReduce, Hbase, MongoDB

Tools: Airflow, Tableau, AWS, Stata, Google & Adobe Analytics, Git, Jenkins, Docker, SonarQube, Kubernetes, JIRA, REST & SOAP API

Libraries: (Python) Tensorflow, PyTorch, Numpy, Pandas, NLTK, Scikit-learn, PyTorch, Spark ML, Keras, Matplotlib, Selenium, SQLAlchemy, Flask, FastAPI, Dash, Plotly; (R) Tidyverse, Plumber, H2O, Prophet, Shiny, ggplot2, Highcharter

ML Algorithms: (Supervised Learning) Linear classifiers, SVM, Decision trees, Random Forest, Regression, Time-series, GBM, XGBoost; (Unsupervised Learning) Clustering, Dimensionality Reduction, Sentiment analysis, (Deep Learning) Neural Networks, Transformers

Methodologies & Frameworks: Agile, Scrum, Kanban, Design Thinking

PROFESSIONAL EXPERIENCE

Grainger, Chicago [Data Science Intern]	06/22 - 08/22
<ul style="list-style-type: none">Redesigned the retrieval-based Recommender system into a ranking algorithm to recommend the relevant products by building a neural network model using Word2Vec and BERT embeddings. Increased product relevance accuracy by 8%.Exposed the model as TF Serving with Docker to integrate it with Grainger's e-commerce platform.	
Société Générale, Bangalore [Specialist Software Engineer - Data Science]	07/18 - 07/21
<ul style="list-style-type: none">Implemented ARA (Analyze, Recommend, and Automate) engine for auto-ticket dispatching, real-time alerting, auto-healing, and workload forecasting to improve incident management; Saved manual efforts of 10+ operation associates and automated models to reduce failure risk.Built a Recommendation Engine to recommend personalized course content to employees using collaborative filtering and similarity matrix; Increased course completion and user engagement by 18%.Engineered optimization models for IT Asset Management to handle recurring alerts and predict critical outages using anomaly detection & mathematical modeling; Mitigated 20% of high-priority incidents.Steered projects to devise Machine Learning algorithms through statistical analysis leading to a process improvement in the Global Technology Solutions Business Unit.Deployed end-to-end time series forecasting and regression framework with interactive dashboards to predict daily job metrics, trends, and seasonality in the bank's infrastructure, reducing 50% of high-priority incidents.Built one-click dashboards for automated reports and tracked KPIs for risk, performance, obsolescence, and vulnerabilities for executive management worldwide; These efforts saved 10+ hours/week spent on reporting and analysis.Contributed to AIOps/MLOps: In-house solution built to help non-technical employees adopt ML and address clustering, time-series, and Anomaly Detection problems, lessening the coding efforts by 30+ hours per month.Awarded Star of the Quarter and the Best Innovactor for my contribution towards Machine Learning solutions.	
Titan Company Ltd., Hosur [Analytics Project Intern]	12/17 - 05/18
<ul style="list-style-type: none">Designed an interactive dashboard to capture manufacturing trends and provide analytical insights to management; These insights aided in an increase of in-house production by ~30% and streamlined the quality assurance process.	

PROJECTS

Text Summarization: Implemented [Intelligent Document Processing](#) to build an abstractive summary of large documents by applying Text Ranking algorithms and Hugging Face. Exposed as FastAPI and integrated with Dash's front-end.

AI-based Chatbots: Developed [conversational chatbot](#) that interprets and answers user queries to improve accessibility using [Natural Language Processing](#) (nltk) and PyTorch.

Crypto price Prediction: [Extract, Transform and Load](#) the crypto data from Kucoin API with technical indicators to predict if the price hits Take Profit or Stop Loss and derive the expected return for an investment using LSTM and GAN models.