RAJAVEL KS

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Skills TLDR version in this page | Next pages continue on the details

<u>BI & Decision Intelligence</u> KPI Governance & Metric Standardization, Executive Dashboards, Looker (LookML), Tableau (RLS), Excel (Macros), Stakeholder Management, Business Storytelling.
<u>Data Reliability & Analytics</u> Debugging Root Cause Analysis, Data Discrepancy Investigation, Source Logic Traceability, Data Quality & Reconciliation, Issue Triage (Customer/Ops Feedback), Durable Fix Delivery with Engineering.
<u>Data Access & Analytics Engineering</u> SQL (Advanced), Curated Datasets, Pandas-based Data Prep, JSON Transformations, Streamlit (Self-Serve Analytics Apps), Python ORM, FastAPI (Data-serving APIs), Reusable Analytics Tooling.
<u>Machine Learning & Statistical Modeling</u> Model Selection & Tradeoffs, Classification/Regression, Probability Calibration, Hypothesis Testing, A/B Testing (Concepts), Bayesian Modeling (Foundational).
<u>Time Series, Forecasting & Marketing Science</u> Grouped Time Series Forecasting/Nowcasting (1–3 month horizons), Marketing Mix Modeling (MMM), Campaign Lift Measurement, Causal Impact + Kalman/State-Space Methods, Dynamic Time Warping (DTW), Tools: PyAF, SciPy, XGBoost (experimentation).
<u>NLP, GenAI & Applied AI</u> Sentiment Analysis (RoBERTa), Text Categorization (Zero-shot BART), Topic Modeling (BERTopic – exploratory), Voice-of-Customer Analytics, RAG Chatbot PoCs, Text-to-SQL (Azure OpenAI), TinyML/TFLite (Edge PoC).
<u>Platforms, Cloud & Delivery</u> Databricks, PySpark, AWS (S3/EC2 basics), GCP Model/Artifact Consumption, Git, Legacy Code Reverse Engineering (R), Training/Mentoring (Python/ML/DL cohorts), Security/Compliance Exposure (ISO 27001 collaboration).

Experience TLDR version in this page | Next pages continue on the details

Senior Data Scientist — Incedo Inc (Apr 2025–Present)
Working with a US telecom client to deliver scalable analytics + engineering. Built an internal Streamlit + Python ORM tooling layer for curated datasets, owned Looker KPI dashboards as a single source of truth, led root-cause analysis for data discrepancies, and co-engineered FastAPI-based data access patterns for an Enterprise AI platform. Ran channel churn insights using pretrained NLP models on customer feedback.

Decision Scientist — Mu Sigma (Jun 2022–Nov 2024)
Delivered marketing + revenue analytics for a major US cruise client: extended MMM insights to non-US markets, measured campaign lift (DTW + Causal Impact/Kalman), and built nowcasting/forecasting for bookings (PyAF + classical time series) after rigorous tradeoff experiments. Built Tableau dashboards with RLS, delivered NLP solutions (RoBERTa sentiment, zero-shot BART categorization), and explored PoCs in RAG and TinyML/edge use-cases; also contributed to L&D (Math for ML, Python/ML/DL training).

Associate – Sales & Operations — Ganit Inc (Feb 2021–Apr 2022)
Owned stakeholder coordination for startup initiatives, supported L&D for new hires, partnered with client AWS IT teams on cloud assets/security protocols, and contributed to ISO 27001-related implementation efforts.

Data Analyst — Ganit Inc (Jun 2019–Feb 2020)
Built end-to-end analytics solutions including interpretable regression-based forecasting for a CPG client, OCR digitization workflows using Tesseract for financial docs, and automated reporting pipelines using Pandas.

Project Associate | Analytics — NPTEL IIT Madras (Oct 2018–Jun 2019)
Supported project + analytics work, modeling mentorship impact on student performance and presenting insights through statistical analysis and visualization.

Operations Associate — BNY Mellon (Apr 2017–Nov 2017)
Supported capital-markets operations and created lightweight Excel macro automations, gaining exposure to analytics-driven process improvement.

Relationship Manager → SRM → KRM — ICICI Securities (May 2015–May 2016)
Managed customer portfolios and consistently met high sales targets, earning rapid promotion; ranked among top MF performers in Chennai through trust-led advisory selling and client retention focus.

Location Legend ■ Bengaluru ▪ Chennai

Senior Data Scientist Incedo Inc Apr 2025 - Present	Partnered with a US Telecom Giant to deliver scalable analytics and engineering solutions. ● <u>Scalable Analytics Tooling</u> Developed and maintained an internal Streamlit application backed by Python ORM to serve curated datasets, significantly reducing ad-hoc data retrieval time for the *Wireline Analytics* team. ● <u>KPI Governance & Looker Ownership</u> Designed and managed Looker dashboards to standardize select core KPIs, establishing a single source of truth for Product Leadership. ● <u>Root Cause Analysis & Resolution</u> Investigated customer and operations feedback to diagnose data discrepancies; partnered with engineering to trace issues to source logic and implement durable backend fixes. ● <u>Enterprise AI Enablement</u> Co-engineered Python-based backend data access patterns and FastAPI endpoints for the Enterprise AI platform, improving data reliability and availability for downstream AI/analytics use cases. ● <u>Channel churn analysis</u> Used pretrained NLP models from *GCP x Artifactory* to determine client feedback based analytics to understand churn of customers from a traditional and classical telecom channel
Health + Upskilling Break	● Had severe bronchitis and had to take some time off to recover ● Used this time to reinforce ML concepts from MIT professors itself using Data Science and Machine Learning: Making Data-Driven Decisions from MIT IDSS ● Did a reinforcement of Marketing Mix Modeling concepts using a course developed by boutique MMM delivery company Aryma Labs online ● Successfully completed IIIT Bengaluru's Software development certification by making use of this downtime ● Learnt foundational CS from GATE CS concepts to understand compute at a fundamental level : When Andrej Karpathy tweeted English is the next programming language, I understood why he said by connecting it to the courses of Theory of Computation and Compiler Design

Decision Scientist
Mu Sigma
Jun 2022 - Nov 2024
	<u>Key Initiatives</u>
	● As part of new hire training
	   ○ Was inducted into the core team which designed Math for Machine Learning curriculum post successful completion of an internal ultra short 1 hour course on Math for ML in its own team.
	   ○ Python cohort based training
	   ○ Course on Machine Learning | Why and Why not in the context of tradeoffs.
	   ○ Deep Learning fundamentals training
	   ○ Hands-on mock projects supervision
	
	<u>Cruise Major in US</u>
	
	COVID-19 hit the tourism industry very hard and cruise industry was hit with no business opportunities then. I was part of Marketing Analytics x Revenue Management team related project for the client
	● <u>Marketing Mix Modeling</u> Co-Led a team which emulated LightweightMMM package based outputs done for US markets by Google team itself to non-US markets. Identified marketing spend performance channel-wise and helped business negate spendings on channels which were simply flying the wheels
	● <u>Campaign Impact Analysis</u> Applied Dynamic Time Warping (DTW) and Causal Impact analysis with Kalman Filter to estimate lift across multiple Designated Market Areas (data from Nielson), isolating the true causal effect of marketing campaigns

	● <u>Nowcasting & Time Series</u> Developed grouped time series models to forecast booking trends at 1-month and 3-month horizons, facilitating accurate budgeting decisions for Revenue Management
	   ○ Achieved this through classical time series models using PyAF package
	   ○ PyAF was chosen after several iterations of experimentations done using logistic curves for booking using SciPy (too rigid), XGBoosting (too flexible), Zero Inflated Poisson models (too rigid)
	● <u>Sales Dashboarding</u> Spearheaded the design of Tableau dashboards with Row-Level Security (RLS) to provide customized, secure views for diverse stakeholders
	● Co-worked with forecasting related guidance and data preparation for a team which was <u>forecasting air demand</u> for people who choose it for last mile connectivity before they onboard or post they complete the voyage, touching at several key moments in the project including but not limited to uncovering data discrepancies using pandas, helping team to transform data using JSON dumps, help reverse engineer a legacy R code which had a tightly coupled and recursive routine calls etc.
	● <u>Sentiment Analysis x Text Categorization</u>
	   ○ Sentiment analysis was completed with very satisfying results using ROBERTa which did the meaty job and we just enabled standardization using pandas and SQL data fetch/push
	   ○ Text categorization started with enabling the decision making team to identify issues on the fly when cruise passengers are on the board and are having some grievances. While topic-modeling frameworks like BERTopic helped uncover simple but more urgent and critical topics like water bottle the precision was quite low. So we defined categories to focus on and used pre-trained model (HuggingFace Transformers | Zero-shot Facebook BART did the job) to categorize them using 30 different multi-class output and choose the top one
	● <u>Initiatives</u> Developed PoCs for RAG-based chatbots, TinyML (TFLite) model for classifying customers on board (with Starlink and no easy internet access on the sea) for enabling precise recommendations
	● Supervised a team to present edge computing uses and connected it to an exclusive cruise on the sea based use case
	● Provided invaluable springboard wisdom from my professional life to co-workers joining analytics work as a newbie including but not limited to avoid algorithmic thinking before doing EDA, use python packages to re-use rather than creating from scratch, using CSV to save files rather than Excel for fast access, PyGWalker as an alternative for vanilla Matplotlib/Seaborn libraries for faster visualization
	
	<u>Consumer Durables Major in US</u>
	● Joined internally and cleared client interview but was not onboarded due to budget constraints
	
	<u>Oil and Gas Major in US</u>
	● Was co-leading a team which developed AI based Custom SQL ledger category Manager which involved skills like Angular, Azure OpenAI, Python, Databricks PySpark to emulate and scale the work of category manager with tools like Text to SQL
	
	<u>Airline Major in US</u>
	● Advised not to work on a forecasting project due to no activity x no data from COVID business halt
	● Helped a team validate a credit card based customer churn model
	   ○ Helped them work on probability calibration of classification models

Associate – Sales & Operations <mark>Ganit Inc</mark> Feb 2021 - Apr 2022	● Coordinated with multiple stakeholders to execute strategic startup initiatives with minimal friction ● Was part of the L&D team for new hires ● Liaised with client AWS IT teams to maintain cloud assets and security protocols ● Collaborated with IT to implement and acquire ISO 27001 certification

Upskilling break	• Learned foundational Calculus through several YouTube videos for understanding the fundamental math of ML from first principles and completed an edX course on pre-university calculus • Completed Udacity's Machine Learning (ML) Nanodegree Program • Completed Udacity's Deep Learning (DL) Nanodegree Program • Competed in AnalyticsIndiaMag's hackathons to get hands dirty on the newly added ML and DL skills
Data Analyst Ganit Inc Jun 2019 - Feb 2020	• Collaborated on an end-to-end analytics solution for a CPG firm, delivering a forecast that outperformed internal business forecasts using interpretable Linear Regression models. • Developed custom OCR applications using Tesseract for a financial firm to digitize documentation. • Automated reporting processes using Pandas for a major beverage firm.
Project Associate | Analytics NPTEL IIT Madras Oct 2018 - Jun 2019	• Was part of the project management team and analytics team. • Analyzed the impact of mentorship on student performance using statistical modeling and visualization.
Health + Upskilling Break	• Had a **left knee ligament tear** while riding my bike. It took some time to recover with physiotherapy. • Used this downtime to upskill myself with some data science courses offline. • Took the MITx Python course.
Operations Associate Bank of New York (BNY) Mellon Apr 2017 - Nov 2017	• Joined by clearing an interview on Capital markets, investment banking • Done some semi automations using Excel Macros, • Happened to understood that analytics team over there
Career Break	• Self prepared for bank exams and failed miserably • Did SQL course offline to check my course interests in Computer Science concepts
Relationship Manager ICICI Securities May 2015 - May 2016	Joined as a rookie for servicing and managing financial portfolio of provided ICICI Securities customers - May 2015 to Sep 2015 • On the first day of the job the OG manager Prabhu Ponnysamy gave me two pills to choose between client hunting and harvesting and recommended harvesting which I heeded. • Had to complete the rookie sales target before 3 months and if not the 4th month buffer. • Cleared the target in the eleventh hour of the 4th month. • Promoted as Senior Relationship Manager Senior Relationship Manager (SRM) - Oct 2015 to Mar 2016 • 6 months timeframe to complete SRM target fulfilled, all coming with justified selling enabled by client trust, since counter intuitively I ask client not to invest in a upmarket and wait for an immediate downmarket to add more profit to their portfolio • Came 4th in the Mutual Funds (MFs) sales chart of Chennai region, just behind 3 heavyweight seniors • At this stage in the progression of role, clients themselves used my AMFI registered EUIN for processing MFs getting me to automatically clear my sales targets Key Relationship Manager - April 2016 to May 2016 • At this stage in the progression of role, I planned to switch to banking in alignment with the hard finance courses which I did in my trimester based MBA

Education_____

Executive PG Programme in Software Development (Full Stack) CGPA 3.77 / 4.00

International Institute of Information Technology Bangalore (IIIT-B)
Mar 2024 – Apr 2025

MBA (Trimester Based with summer internship)

Thiagarajar School of Management, Madurai, 2015

B.Tech in Mechanical Engineering

Kalasalingam University, Srivilliputhur, 2013

Certifications_____

- Data Science and Machine Learning: Making Data-Driven Decisions — MIT IDSS (Institute for Data, Systems and Society) – Great Learning | Nov 2024 – Mar 2025 (Issued Mar 2025)
  - Completed a rigorous program covering model selection, regression, causal inference, deep learning, graphical models, and recommender systems; awarded 8 CEUs.
- Data Structures and Algorithms in Python — DataCamp | Issued May 2024
- Linear Classifiers in Python — DataCamp | Issued Apr 2024
- Machine Learning Fundamentals with Python — DataCamp | Issued Apr 2024
- Unsupervised Learning in Python — DataCamp | Issued Apr 2024
- Developing Machine Learning Models for Production — DataCamp | Issued Mar 2024
- Introduction to Deep Learning with PyTorch — DataCamp | Issued Mar 2024
- Data Literacy — DataCamp | Issued Feb 2024
- MLOps Concepts — DataCamp | Issued Feb 2024
- Supervised Learning with scikit-learn — DataCamp | Issued Feb 2024
- Intermediate R — DataCamp | Issued Oct 2023
- Introduction to R — DataCamp | Issued Oct 2023
- Convolutional Neural Networks — DeepLearning.AI (Coursera) | Issued Oct 2020
- Deep Learning Nanodegree — Udacity | Issued Oct 2020
- Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization — DeepLearning.AI (Coursera) | Issued Oct 2020
- Structuring Machine Learning Projects — DeepLearning.AI (Coursera) | Issued Oct 2020
- Neural Networks and Deep Learning — DeepLearning.AI (Coursera) | Issued Sep 2020
- Calc001x: Pre-University Calculus (DelftX) — edX | Issued May 2020
- Machine Learning — Introduction — Udacity | Issued Feb 2020
- Business Applications of Hypothesis Testing and Confidence Interval Estimation — Rice University (Coursera) | Issued Jun 2019
- Linear Regression for Business Statistics — Rice University (Coursera) | Issued Jun 2019
- Basic Data Descriptors, Statistical Distributions, and Application to Business Decisions — Rice University (Coursera) | Issued May 2019
- Introduction to Data Analysis Using Excel — Rice University (Coursera) | Issued May 2019
- 15.071x: The Analytics Edge — MITx | Issued Apr 2019
- The Complete SQL Bootcamp: Go from Zero to Hero — Udemy | Issued Sep 2018
- Tableau for Beginners: Get DA Certified, Grow Your Career — Udemy | Issued Aug 2018
- 6.00.1x: Introduction to Computer Science and Programming Using Python — MITx | Issued Jul 2018
- Requirements Gathering for Secure Software Development — University of Colorado System (Coursera) | Issued Feb 2018
- HLS2X: Contract Law: From Trust to Promise to Contract — HarvardX | Issued Oct 2017