

V L RAMAN RAJ BOTTA

(405) 269-1815 | botta.raman@gmail.com | [linkedin.com/in/raman-raj-botta/](https://www.linkedin.com/in/raman-raj-botta/) | [Link: Portfolio](#)

Professional Summary

7-year Data Scientist delivering predictive models & data solutions across edtech/civic/healthcare; skilled in SQL, Python, survival analysis, A/B testing, Tableau/Power BI; experienced in deploying ML workflows on Azure/GCP.

Work Experience

Oklahoma State University, *Research Assistant*

October 2023 – May 2025

- Streamlined Wings of Hope's CAP60 data ingestion into BigQuery by engineering robust, reusable, and efficient SQL stored procedures leveraging BigQuery's procedural language capabilities.
- Enhanced operational visibility and decision-making for senior stakeholders by developing and deploying automated, interactive Tableau dashboards, which provided timely KPI insights via Tableau Server subscriptions.
- Improved question-answering capabilities by fine-tuning a T5-small model with LoRA for the SQuAD V2 dataset and subsequently developing a custom RAG system from scratch, which resulted in a 21% increase in the exact match score and achieved 72% faithfulness, respectively.

GVMC, *Data Scientist*

October 2019 – July 2023

- Built property tax delinquency ML pipeline (ensemble models, logistic regression, chi-square), boosting detection accuracy by 27% and reducing late payments by 10% via targeted interventions.
- Segmented 1.6M+ property owners using K-Means clustering based on property type, location, and payment history. Validated cluster differentiation using post-hoc ANOVA and silhouette scores, enabling hyper-targeted outreach.
- Drove a 28% increase in on-time tax compliance and 22% reduction in enforcement workload through RCT-based tax reminder interventions, analyzed via difference-in-means testing and regression.
- Automated daily operational reporting by building Big Query-driven Looker dashboards, improving data visibility for business stakeholders and reducing manual reporting time by 40% along with utilizing scheduler to refresh periodically.
- Delivered tailored insights for ad hoc data requests by performing complex data extraction and analysis entirely in Big Query, streamlining workflows and accelerating decision-making across departments.

Chegg India, *Sr Data Analyst*

February 2016 – October 2019

- Built models to estimate customer lifetime value using purchase frequency, recency, and behavioral signals; applied clustering to group users by lifecycle stage, helping marketing teams prioritize retention and acquisition efforts, and optimize CAC across campaigns.
- Modeled churn risk and conversion likelihood using funnel analytics and survival analysis; extracted time-to-churn and cohort-level retention metrics, integrating insights into Tableau dashboards that improved Net Revenue Retention and informed monthly forecasting cycles.
- Designed A/B tests for product and pricing experiments; used statistical testing (t-tests, regression) and causal inference to measure Uplift, CR, and RoI, driving decisions on feature adoption and monetization strategies.

Consulting Projects

Hugging Face: Developed Google ADK multi-agent system for GAIA benchmark with official Agentic certification.

Assurant: Built Cloud Run-based adaptive pricing agents using Prophet forecasting market strategy optimization.

Humana: Delivered XGBoost model (AUC 0.78) for care visit prediction via survival/causal analysis; national 11th rank.

ISN: End-to-End Predictive Modeling for Mushroom Toxicity Classification using FastAPI and Azure App Service.

Skills

- Languages:** Python, JavaScript, R, Shell Scripting
- Cloud & Big Data:** Big Query, Google Cloud Run, Dataflow, Pub/Sub, Cloud Functions, Synapse Analytics
- Business Intelligence:** SQL, Tableau, PowerBI, Excel, SSMS, Looker Studio, SAS.
- AI & Agents:** Vertex AI, Azure AI Foundry, Llama Index, GCP ADK, Autogen 0.4, LangChain, Azure ML
- Others:** Linux, Flask, FastAPI, Terraform, Git, Pytorch, Statistics, Docker, Kubeflow, React, CI/CD, MongoDB

Education

Oklahoma State University, Master of Science in Business Analytics and Data Science | CGPA: 4

- Certifications: Tableau Desktop Specialist, Azure Data Fundamentals, Azure AI fundamentals

Miracle Educational Society (JNTUK), Bachelor of Technology in Electronics and Data Science | CGPA: 3.8