# JAYASURYA (JAY) RAGUPATHI

📞 765-701-9050  ✉ jragupati@gmail.com  ✉ jayasurya.jazz@gmail.com  in jayasurya-r  ⓞ JaysRag

## Profile - Data Scientist

Statistical and socially responsible data scientist with 3+ years of experience driving more than **$1M** growth for Fortune 500 companies and empowering federal policymakers to uplift 1.5M veterans. Agile Data Analyst with experience building Analytical products for internal and external consumption(E.g. Dashboards, automatic analysis, algorithms)

## Technical Skills

**Languages**: Python, SQL, R, PySpark

**Tools**: Tableau, Advanced Excel, CPLEX, AWS SageMaker, Dataiku, Kubeflow, Databricks, Jupyter, LLMs, Tensorflow machine learning frameworks, Keras, ScikitLearn, Kubernetes, Microsoft SQL Server, SAS, Model Monitoring tools, Kubeflow, MLFlow.

**Data Modeling Skills**: statistics, data analytics, forecasting, predictive analytics, data mining., forecasting, regression Analysis, model testing, logistic regression, machine learning, neural networks, optimization, SVM, NLP, Model Training, Model Deployment, Model Registry,

## Experience

**Military Family Research Institute**                                   **July 2023 - Present**
*Data Scientist*                                                                *West Lafayette, IN*

- **Empowered federal policymakers** with data-driven visualizations, positively impacting **1.5M** military families.
- Automated end-to-end workflows using **Python**, **Tableau** and **HTML** to create snapshots on military family
- Created impactful data visualization dashboards and reports for complex data, **illuminating federal policy impact** on military families- Measuring Communities

**FedEx Inc.**                                                          **May 2022 - August 2022**
*Data Scientist - Internship*                                                    *Memphis, TN*

- Implemented **XGBoost** with extensive feature engineering using **Python**, **SAS** and **Databricks** to **enhance trailer requirements forecasts**, achieving **39% accuracy improvement**.
- Leveraged **deep reinforcement learning models** to **innovate four customized use cases**, aligning with business challenges and model requirements.

**Tredence Inc.**                                                      **August 2019 - July 2021**
*Analyst*                                                                       *Bangalore, India*

- Data Quality Management: Developed, optimized, and tested **language models like BERT** using **PyTorch** and **TensorFlow** for a data quality product **generating revenues worth $150K**
- **EDA**: Performed extensive **data wrangling**, **data transformations**, **statistical modeling** and **feature engineering** using **Python** and **AWS Sagemaker** on retail data to **save data quality costs by 3X**.
- Developed data engineering ML pipelines in **Kubeflow** and improved the runtime by **10X**
- **Measured and tracked analytics improvements** against key performance indicators for MLOps products

## Projects

**Personalized Amazon Product Review Summarizer** | *Python, Langchain, LLMs*     **July - September Year 2023**

- Developed a web-app to summarize and create customized ratings on products based on user's preferences.
- Used GPT 3.5 API to analyze reviews and an analytic layer to calculate custom scores. Accelerates eCommerce shopping experience by 10X using LLM.

**Cross-sell product recommendation system:** | *Python, Tensorflow, Pytorch*        **April - May 2020**

- Built a cross-sell recommendation system for a networking hardware company using collaborative filtering technique and cosine similarity in TensorFlow.
- Showed a 23% increase in cross-selling sales in 3 quarters of sales.

**Performance comparison of drones for last mile delivery:** | *Python, CPLEX*     **August 2022 - May 2023**

- Developed a truck-drone vehicle routing problem to compare the performance of hydrogen and battery drones using Amazon's last-mile delivery data.
- Improved the average delivery time by 28.45% by usage of fuel cell drones

## Leadership and Collaboration

- Collaborates: Headed a team of 3 to build a BERT-based data cleaning classifier for eCommerce data and accomplished the revenue goal of $120K for the team. Won "Pat on the Back" award for customizing the solution for the customer.
- Mentored and collaborated with new grad interns and helped them gain domain and technical expertise.
- Served as scrum master, planned sprints by adhering to agile best practices, maintained JIRA boards