

Archana.G.S

Data Scientist

[Linkedin](#) [Upwork](#) [Github](#) [Published paper](#)

Milpitas,CA
669 231 9980
archanags001@gmail.com

Data Scientist with over 5 years of experience creating and deploying machine learning models, now focusing on Large Language Models (LLMs) and agent-based AI systems. I have built a multi-agent AI report generator and developed tools using LangChain, showing my ability to turn advanced AI techniques into practical applications. I am looking to combine my data science background with my growing expertise in AI agents to develop reliable, real-world intelligent systems.

AI AGENT & LLM PROJECTS

Multi-Agent AI Report Generator

- Designed and deployed a **multi-agent system** with LangGraph and the Gemini API to automate data analysis and professional report generation from raw CSV files.
- Built specialized agents for **data profiling, visualization, and narrative generation**, supported by advanced prompt engineering and modular workflows.
- Implemented a **Safety Node with conditional retry logic**, along with error handling, health checks, and troubleshooting tools to ensure reliability.
- Managed the full development lifecycle, including dependency management, configuration, and version control with Git.

Streamlit AI Guide | AI Tutor for Streamlit Documentation

- Built an interactive **AI tutor** that transforms static Streamlit documentation into a dynamic, conversational learning tool.
- Implemented a **RAG pipeline** with LangChain, Gemini API, and ChromaDB to deliver accurate, context-aware answers and on-demand code examples.
- Developed a **data ingestion and embedding pipeline** to clean and store official documentation in a vector database.
- Designed a user-friendly **chat interface with conversational memory and source transparency**, enabling faster, grounded learning for developers.

EXPERIENCE

Data Scientist — Freelance (January 2019 - PRESENT) Upwork

- Achieved **Top Rated Plus** freelancer badge, ranking in the **top 3%** of Upwork talent.
- Delivered end-to-end development and deployment of predictive ML models for 11 clients, including solutions leveraging neural networks and tree-based algorithms.
- Designed and developed a **News search tool leveraging LLM and Langchain technologies**, enhancing the efficiency of information retrieval and analysis.
- Worked on Azure Databricks to preprocess, analyze, and model datasets exceeding 1 billion rows, optimizing pipelines for performance and scalability.
- Developed a real-time anomaly detection system for financial transactions using PyTorch and PySpark, improving fraud detection rates by **15%**.

Data Scientist — Wonder Chrome (December 2021 - December 2024)

- Conducted A/B testing experiments to assess the effectiveness of various promotion strategies, resulting in a remarkable **24% increase in revenue**.
- Developed machine learning models using scikit-learn to optimize pricing strategies, leading to a substantial **12% boost in profit**.
- Developed a Large-scale multi-label text classification model using Tensorflow and Keras to enhance text analysis capabilities.

Artificial Intelligence Engineer intern —Uniquify Inc(August 2021-October 2021)

- Trained neural networks with TensorFlow, optimizing model accuracy and reducing computational costs.
- Developed and deployed image segmentation algorithms to solve complex vision-related challenges.

Data Analyst — Centrique Inc (February 2020 - January 2021)

- Automated text analysis with NLP (NLTK), cutting manual effort by **39%**.
- Built predictive models for classification and anomaly detection,enhancing decision-making
- Developed dashboards in Tableau and Power BI to deliver insights to stakeholders.

SKILLS

Programming Languages:

Python, R, Core Java, Basic JavaScript

AI Agent & LLM Frameworks:

LangChain, LangGraph, Hugging Face, OpenAI API, Google Gemini API, Transfer Learning

Machine Learning and AI:

TensorFlow, PyTorch, Scikit-learn, Causal Inference, Reinforcement Learning, NLP techniques

Computer Vision: OpenCV, Transfer learning,YOLO, VGG16, ResNet

Cloud Services:

AWS, Azure

Data Engineering & Databases:

Pandas, PySpark, SQL, ChromaDB, Vector Databases, Data Pipelines

Visualization & Reporting:

Tableau, Power BI, Dash, Matplotlib, Seaborn, Retool

Web & App Development:

Streamlit, FastAPI, REST APIs

EDUCATION

Master of Technology in

Electronics

with specialization

in Signal processing

Bachelor of Technology in

Electronics and communication Engineering

WORK ELIGIBILITY:

EAD(Employment Authorization Document)