# Bhavagna R Al/ML Engineer | bhvilla1176@gmail.com | +1 (806)600-4707 | Linkedin

#### **Summary:**

Data Scientist and Generative AI / ML Engineer with hands-on experience in designing, developing, and deploying scalable machine learning models, LLM applications, and AI solutions across cloud environments. Strong background in supervised and unsupervised learning, NLP, computer vision, deep learning, and MLOps. Proficient in leveraging Gen AI frameworks, transformer models, and vector databases to build RAG systems, chatbots, and LLM fine-tuning pipelines. Experienced in data preprocessing, model training, A/B testing, prompt engineering, and integrating AI services with REST APIs. Demonstrated ability to improve model performance by over 30%, reduce processing time by 40%, and increase data pipeline efficiency by 45%.

#### Skills:

- Languages & Frameworks: Python, PyTorch, TensorFlow, Hugging Face Transformers, LangChain, OpenAI, Scikit-learn, FastAPI, Flask.
- Machine Learning & Gen Al: LLMs, RAG, Fine-tuning, Prompt Engineering, NLP, Computer Vision, Recommendation Systems, Chatbots.
- Data & Storage: SQL, Pandas, NumPy, Spark, Hadoop, Hive, Delta Lake, Snowflake, BigQuery
- MLOps & Deployment: Docker, Kubernetes, MLflow, SageMaker, Airflow, Git, CI/CD, FastAPI, REST APIs
- Vector DBs & Tools: FAISS, Pinecone, Weaviate, ChromaDB, Elasticsearch, Milvus
- Cloud Platforms: AWS (S3, EC2, Lambda, SageMaker), GCP, Azure
- Visualization & Analysis: Matplotlib, Seaborn, Plotly, Tableau, Power BI

#### **Education:**

Master's in Computer Science from Texas Tech University, Lubbock, Texas

#### **Professional Experience**

#### Best Buy | Data Scientist / Gen Al Engineer | Sep 2024 - Current

- Develop Retrieval-Augmented **Generation (RAG) systems** using **OpenAI, LangChain,** and **FAISS**, improving response accuracy by 37%.
- Build LLM-based internal chatbot using GPT-4, Pinecone, and LangChain, reducing customer service query time by 42%.
- Fine-tune open-source models (LLaMA2, Falcon) using domain-specific datasets and frameworks like Hugging Face and NLTK, increasing model accuracy by 28%.

Automate model training, evaluation, and tracking using MLflow and Airflow pipelines, boosting workflow efficiency by

- Deploy scalable AI models using Docker, Kubernetes, and FastAPI, reducing inference latency by 35%.
- 40%.

   Engineer prompts for LLMs such as GPT-4. Claude, and Gemini to optimize ΩΔ and summarization tasks, improving
- Engineer prompts for LLMs such as GPT-4, Claude, and Gemini to optimize QA and summarization tasks, improving output quality by 25%.
- Apply advance **NLP techniques** using **NLTK, Transformers**, and **LangChain** for tasks like **entity recognition**, **summarization**, and **classification**.
- Perform A/B testing and model performance evaluation using SQL and Power BI to assess feature enhancements and drive adoption metrics.

## Flipkart | Data Scientist / Al/ML Engineer | Aug 2020 - Jun 2023

- Develop supervised **ML models** for demand **forecasting** and **personalized** recommendations using **Scikit-learn**, **LightGBM**, and **XGBoost**, improving accuracy **by 32%**.
- Build NLP pipelines for text classification, named entity recognition, and sentiment analysis using BERT, spaCy, and NLTK, increasing F1-score by 27%.
- Create REST APIs with Flask and FastAPI to serve ML models in real time, reducing inference latency by 38%.
- Implement computer vision models with TensorFlow and OpenCV for defect detection, achieving 89% precision on production data.
- Optimize data pipelines using Apache Spark and Airflow, increasing data throughput by 45% and pipeline uptime by 33%.
- Use AWS SageMaker for end-to-end ML workflows, reducing model deployment time by 35% and cloud costs by 30%.
- Build interactive dashboards with Tableau, Seaborn, and Plotly to visualize model performance and business insights.

### Certification:

- CISCO CCNA Trained Certificate
- IBM Data Analyst Certificate
- AWS Cloud Practitioner Certificate