

KIRAN KUMAR ARUMULLA

AI | PYTHON DEVELOPER

Highly skilled Software Engineer with over 4 years of experience in Python development, targeting a challenging role in the IT industry to utilize expertise in creating innovative software solutions. Targeting positions in Application Developer and Data Science, Machine Learning and Generative AI.

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Profile Summary

- Possessing **extensive experience in the IT industry**, with a specialization in Python development, open-source technologies, and a **strong focus on Machine Learning, REST API Development, and Data Science**
- Currently working as, a *Software Engineer at CoArtha Techno Solutions*, contributing significantly to various projects and collaborating effectively with cross-functional teams
- Demonstrating **proficiency in developing professional Backend REST APIs using Python, Flask, and MongoDB**, along with a deep understanding of machine learning algorithms such as linear regression, logistic regression, and KNN
- Skilled in **data analysis using Python & Pandas**, extracting valuable insights, and showcasing expertise in Natural Language Processing (NLP) pipeline using NLTK and Spacy, including Named Entity Recognition
- Experienced in **utilizing Postman and Git** for efficient Project Management, ensuring high-quality deliverables, and **receiving the Best Employee Award at CoArtha Techno Solutions in 2022 for exceptional performance**.

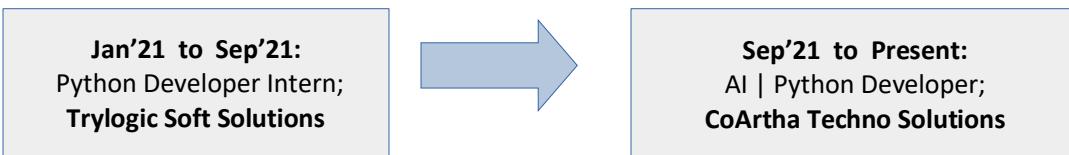
Competencies

Software Engineering
Full Stack Development
Frontend Development

Backend Development
Web Development
Agile Methodologies

Version Control (Git)
Database Management
API Integration

Work Experience



Software Engineer | CoArtha Techno Solutions, Hyderabad | Sep'21-Present

- Built **RESTful APIs** to automate communication workflows including job alerts, interview notifications, and follow-ups.
- Integrated third-party email services like **Postmark**, **SendGrid**, and **Amazon SES (Simple Email Service)** for high-deliverability transactional emails.
- Integrated SMS gateway services such as **Twilio**, **Plivo**, **KooKoo**, and **Telnyx** to send real-time text notifications to candidates across various regions.
- Ensured message templating, custom headers and payload validation to maintain consistency, personalization, and security.
- Built **RESTful APIs in Python** (or your stack — e.g., Flask/FastAPI/Django) to collect and process logging and monitoring data from multiple services and microservices.
- Designed and developed custom APIs to collect and expose system metrics, error logs, and API usage data, which were then visualized through interactive dashboards using **Grafana**.
- Created custom Grafana dashboards with real-time visualizations (graphs, heatmaps, tables) to monitor application logs and etc.
- Collaborated with other developers to create software architectures based on client's needs.
- Managed multiple projects simultaneously while meeting tight deadlines without compromising quality.
- Developed multi-threaded programs by leveraging threading or multiprocessing modules of Python.
- Utilized Python libraries such as **NumPy** and **Pandas** for data analysis and manipulation, and applied **Regular Expressions** for data matching. And Worked with **Matplotlib** for data visualization.

- Spearheading the creation of **Flask-based APIs** tailored for data-intensive applications, facilitating seamless interaction and optimizing data transfer between **front-end and back-end systems**
- Performing in the **advancement of sophisticated resume parsing systems**, responsible for extracting and structuring information from unstructured textual data
- Utilizing **expertise in NLP techniques**, regular expressions, and information retrieval methodologies to accurately extract and organizing pertinent data from resumes
- Providing **mentorship to junior team members**, imparting valuable insights into best practices **encompassing API development, machine learning implementation**, and data analysis, thereby nurturing skill enhancement and team advancement
- Establishing close **collaborations with product teams** to define project prerequisites, scope, and milestones, ensuring precise alignment with business objectives and prompt project completion
- Orchestrating **end-to-end machine learning pipelines**, commencing from data preprocessing and feature engineering, and culminating in model selection and deployment
- Employing **natural language processing (NLP) methodologies** to construct a robust text classification model

Experience in GEN AI

- Developed an **AI-powered email generation** tool using OpenAI GPT API to draft professional and personalized emails automatically.
- Developed an **AI Voice Bot** that listens to user queries and responds in natural human-like speech using Speech-to-Text (STT) and Text-to-Speech (TTS) pipelines.
- Developed and deployed **end-to-end Generative AI applications** leveraging LLMs (GPT, LLaMA, Mistral) integrated with LangChain and vector databases (FAISS, Pinecone, Chroma).
- Implemented **Retrieval-Augmented Generation (RAG) pipelines** to enable context-aware question answering over enterprise documents (PDFs, CSVs, databases).
- Optimized **LLM performance through prompt engineering, caching, and context management**, improving response accuracy and latency by 30%.
- Built and fine-tuned **transformer-based models** (BERT, T5, LLaMA) for NLP tasks such as text summarization, sentiment analysis, and document classification.
- Integrated **OpenAI and Hugging Face APIs** into production systems for text generation, embeddings, and chatbot use cases.
- Designed scalable **cloud-based GenAI infrastructure** using AWS (Lambda, S3, SageMaker) and containerized deployments with Kubernetes.
- Implemented **model evaluation and optimization pipelines** using techniques like quantization (LoRA, QLoRA) and model compression to reduce compute cost.
- Developed **custom data preprocessing and embedding pipelines** for unstructured text data using Python, LangChain, and sentence-transformers.
- Built **interactive AI chatbots and assistants** using Streamlit, Flask API, and React integrated with LLM-based backends.
- Collaborated with cross-functional teams to transform business requirements into AI-driven solutions, achieving measurable improvements in automation and insights.

Internship

Python Developer | Trylogic Soft Solutions, Vijayawada | Jan'21 to Sep'21

- Acquired practical expertise in crafting **Python applications**, refining coding skills, and adeptly addressing debugging and problem-solving tasks
- Participated actively in a comprehensive machine learning training initiative, gaining profound **knowledge of core ML algorithms, data preprocessing, model assessment, and predictive analytics**
- Demonstrated exceptional analytical prowess by effectively recognizing and resolving technical obstacles throughout the developmental phase
- Utilized a logical methodology for debugging code and optimizing algorithms, contributing to enhanced performance outcomes
- Collaborated seamlessly with cross-functional teams, sharing insights, receiving valuable feedback, and making constructive contributions to discussions; displayed a **team-oriented perspective to streamline achievement of project objectives**

Achievements

Outstanding Achievement Award, 2022:

Acknowledged as the recipient of the esteemed "Outstanding Achievement Award for 2022." This accolade honors exceptional contributions, unwavering dedication, and remarkable performance. Demonstrated consistent commitment to project success, team collaboration, and surpassing expectations, culminating in this prestigious recognition.

Technical Skills

- **Programming Language:** Python
- **Data and AI:** Data Science | Machine Learning | Natural Language Processing (NLP) | Pandas | Numpy | Generative AI | Azure Open AI
- **Framework:** Flask, FastApi
- **Database:** MongoDB, Elastic Search, SQL
- **Web Technologies:** HTML, CSS 3
- **Operating System:** Linux
- **Integrated Development:** Pycharm, Jupyter Notebook
- **Source and Version Control:** GIT

Education

B.Tech. (CSE): Audisankara College of Engineering & Technology in 2019

Certifications

- Nasscom certificate awarded by Trylogic Soft Solutions for AI and Python skills.

Personal Details

- **Date of Birth:** 25th September 1998
- **Address:** Hyderabad-500081
- **Languages Known:** English, Telugu