Techrefic

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TECH LEAD - DATA SCIENCE

Job Title:- Tech Lead - Data Science

Location:- Indore+Remote

Employment Type:- Full Time

Department:- Development

Salary Range:- INR 75,000 - 150,000 /Monthly

Job Description:-

We are looking for a **Tech Lead – Python Developer / Data Engineer / Machine Learning Engineer** who can **lead a team, manage projects, and build AI-driven scalable applications.** The ideal candidate should have expertise in **backend development, data engineering, machine learning, and large-scale AI architectures, including Vector Databases and Large Language Models (LLMs).** You will work on **designing and implementing high-performance applications, real-time streaming, AI pipelines, and vector-based search solutions** while guiding a team of developers.

Skill & Qualification:-

Required Skills & Qualifications:

- 5+ years of experience in **Python backend development, data engineering & AI.**
- Strong expertise in **Vector Databases (FAISS, Milvus, Weaviate, Pinecone).**
- Experience in LLM-based applications, Transformer models, and NLP pipelines.
- Proficiency in **MongoDB, PostgreSQL, Redis, and Elasticsearch.**
- Strong experience with **data processing, ETL workflows, and streaming data.**
- Hands-on experience with **Celery, Kafka, RabbitMQ, Redis Pub/Sub,** or similar message brokers.
- Experience in **Ubuntu/Linux** server management.
- Hands-on experience in **Docker, Kubernetes, and CI/CD pipelines.**
- Strong problem-solving, algorithmic thinking, and leadership skills.

Nice to Have (Preferred Skills):

- Experience with **Graph databases (Neo4j, ArangoDB).**
- Knowledge of Serverless architectures **(AWS Lambda, GCP Cloud Functions).**

- Familiarity with **Big Data tools (Hadoop, Dask, Apache Beam).**
- Experience with **LangChain and RAG-based AI applications.**
- Knowledge of **Airflow or Prefect** for workflow orchestration.

Job Roles & Responsibilities:-

Leadership & Team Management:

- Lead a team of **Python developers, Data Engineers, and AI/ML engineers.**
- Architect and oversee the development of scalable **AI-driven applications.**
- Conduct code reviews, enforce best practices, and mentor junior developers.
- Collaborate with stakeholders to define and execute **LLM-based solutions.**

Backend Development & Data Engineering:

- Architect and develop scalable backend systems using **Python**.
- Design and optimize **REST APIs, WebSockets, and GraphQL services.**
- Develop **ETL pipelines** for real-time and batch data processing.
- Implement task scheduling & distributed computing using **Celery, Kafka, or Airflow.**
- Work with message queues **(Kafka, RabbitMQ, Redis Pub/Sub)** for event-driven architectures.
- Optimize system performance using **multi-threading, multiprocessing, and async programming.**
- Design and manage **data warehouses and data lakes (e.g., Snowflake, Delta Lake, BigQuery).**

Machine Learning, LLMs & Vector Databases:

- Develop and deploy **LLM-based applications using OpenAI, Hugging Face, or custom models.**
- **Work with RAG (Retrieval-Augmented Generation)** pipelines for AI applications.
- Implement vector-based search using **FAISS, Milvus, Weaviate, or Pinecone.**
- Train and fine-tune Transformer models **(BERT, GPT, LLaMA, etc.) for NLP tasks.**
- Deploy ML models using **MLflow, Kubeflow, TensorFlow Serving, or FastAPI.**
- Optimize data pipelines and embeddings for efficient LLM performance.

Streaming & Real-Time Processing:

- Work with **Kafka, Apache Flink, Spark Streaming, and Redis Streams** for real-time data processing.
- Implement real-time AI applications using **WebSockets & asynchronous processing.**
- Design and optimize LLM inference pipelines for low-latency applications.

Databases & Data Storage:

- Expertise in **MongoDB, Redis, and Elasticsearch.**
- Experience with **Vector Databases for AI-driven applications.**
- Work with **NoSQL & SQL databases,** ensuring efficient indexing and query optimization.
- Implement **sharding, partitioning, and caching strategies** for large-scale systems.

Cloud & DevOps:

- Deploy and manage applications on **AWS, GCP, or Azure.**
- Set up **CI/CD pipelines (GitHub Actions, Jenkins, GitLab CI/CD)** for automated deployments.
- Containerize applications using **Docker and orchestrate them with Kubernetes.**
- Implement infrastructure as code **(Terraform, Ansible, CloudFormation)** for scalable environments.

Security & Performance Optimization:

- Ensure application security using **OAuth, JWT, SSL/TLS,** and encryption techniques.
- Perform profiling, logging, and monitoring using **Prometheus, Grafana, and ELK Stack.**
- Optimize memory usage, query performance, and API response times.