

Data Scientist (LLM & Agentic AI Specialist) Job Description Template

Job Title: Data Scientist – LLM & Agentic AI Specialist

Location: [Specify Location or Remote]

Job Type: [Full-time/Part-time/Contract]

About the Role

We are seeking an innovative and technically adept Data Scientist with expertise in large language model (LLM) engineering, agentic AI, and AI/ML technologies to build the next generation of intelligent applications. In this critical role, you will leverage your deep understanding of natural language processing, generative AI, and AI architectures to design, develop, and deploy cutting-edge AI solutions that drive transformation across our business domains. If you are passionate about building sophisticated AI systems, creating value with language models, and advancing the frontier of autonomous and agentic AI, this is your chance to make a significant impact on our AI strategy and technology roadmap.

Responsibilities

- Design, develop, and fine-tune LLM-based systems (e.g., GPT, Claude, Llama, other transformer architectures) to create intelligent, context-aware applications.
- Architect and implement agentic AI solutions, including multi-agent systems, AI agents for workflow automation, and autonomous task execution.
- Collaborate with cross-functional teams to understand requirements and translate business challenges into impactful AI-driven solutions.
- Evaluate, select, and integrate suitable AI/ML frameworks, libraries, and tools for natural language understanding, generation, and reasoning.
- Develop data pipelines for training, evaluating, and benchmarking LLMs and agentic AI systems, ensuring scalability and robustness.
- Conduct cutting-edge research in AI/ML, stay up-to-date with the latest advancements, and translate findings into practical business applications.
- Apply prompt engineering, retrieval-augmented generation (RAG), and advanced prompting strategies for optimal model performance.

- Optimize AI solutions for quality, fairness, explainability, safety, and compliance.
- Mentor and support junior data scientists and engineers on LLM and agentic AI best practices.
- Produce high-quality technical documentation, model cards, and clear presentations for technical and business stakeholders.

Required Skills & Experience

- Bachelor's or Master's degree in Computer Science, Data Science, Artificial Intelligence, or a related field (or equivalent experience).
- Proven experience (typically 3+ years) in AI/ML engineering or data science, including hands-on work with LLMs.
- Strong knowledge of transformer architectures, natural language processing, and generative AI concepts.
- Experience with Python and popular AI/ML libraries and frameworks (e.g., PyTorch, TensorFlow, Hugging Face Transformers, LangChain).
- Expertise in agentic AI, multi-agent systems, autonomous agents, or AI workflow orchestration.
- Familiarity with cloud-based AI solutions and scalable model deployment (e.g., AWS Sagemaker, Azure ML, GCP AI Platform).
- Understanding of prompt engineering, RAG, model fine-tuning, and large-scale inference pipelines.
- Strong data engineering skills, including working with structured and unstructured data, feature engineering, and data pipeline design.
- Excellent analytical, problem-solving, and communication skills.

Nice-to-Have Skills

- Hands-on experience with reinforcement learning, online learning, or deep RL agent frameworks.
- Familiarity with vector databases, embedding stores, and knowledge graphs for advanced AI applications.
- Experience with MLOps practices, model monitoring, and responsible AI.

- Track record of contributions to open-source LLM or agentic AI projects, or academic publications in relevant fields.
- Prior experience implementing chatbot frameworks, virtual assistants, or autonomous workflows using LLMs.
- Certifications in advanced AI technologies, cloud AI platforms, or ML engineering.

Why Join Us?

- **Innovative Projects:** Build and deploy groundbreaking AI applications that redefine what's possible.
- **Collaborative Environment:** Work with a talented and diverse team focused on solving critical, real-world problems.
- **Career Growth:** Access mentorship, advanced research opportunities, and leadership pathways in AI.
- **Flexible Work Options:** Benefit from a remote or hybrid setup to support your work-life integration.
- **Inclusive Workplace:** Join a forward-thinking culture that values and celebrates innovative thinking and diversity.

Apply Now

Do you want to shape the future of AI and work on industry-defining projects? Join [Your Company Name] as a Data Scientist (LLM & Agentic AI Specialist) and help invent the intelligent systems of tomorrow. Apply today!