



Senior data scientist GenAI

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Are you passionate about cutting-edge AI and language models? Do you want to shape the future of how personal customers interact with Danske Bank? We are looking for a Senior Data Scientist with deep expertise in Natural Language Processing (NLP) and Generative AI (GenAI) to join our Conversational AI unit within the Personal Customers AI Centre of Excellence.

Who are we

The Personal Customers AI Centre of Excellence is a diverse team of data scientists, ML engineers and MLOps engineers. Our Conversational AI unit builds adviser and customer-facing GenAI-powered solutions and stays at the forefront of technology and research to create real value for customers.

What you will do

As a Senior Data Scientist, you will lead the development of language-driven solutions for our Conversational AI unit, enhancing the AI Assistant with actionable flows, building RAG (Retrieval-Augmented Generation) systems connected to internal data and co-designing multi-agent sets that empower customers with self-service capabilities.

Your key responsibilities will include:

- Designing, developing and optimising advanced NLP/GenAI solutions using LLMs, including auxiliary tools such as NER, offensive speech detection, information masking and summarisation on multi-turn conversational input.

- Expanding and implementing RAG pipelines that integrate vector databases and embedding models for structured and unstructured data and making them work effectively in a conversational setting.
- Collaborating with ML engineers, data engineers and product teams to integrate and deploy models into production environments using Python, core ML libraries, Docker, Kubernetes and cloud platforms (AWS Bedrock, Azure, GCP, Databricks).
- Driving experimentation, A/B testing and model evaluation strategies using metrics such as BLEU, ROUGE, F1, exact match, faithfulness and hallucination detection, and continuously improving latency, accuracy and LLM judges.
- Staying current with the latest research and industry trends in LLMs, transformers and prompt engineering, identifying areas for improvement in existing solutions, and mentoring junior team members while contributing to best practices in model development and MLOps.

Your skills and experience

- 5+ years of experience in data science or machine learning with a strong focus on NLP, and solid knowledge of transformers, tokenisation, embeddings and attention mechanisms.
- Hands-on experience with GenAI frameworks and tooling such as LangChain, LlamaIndex, OpenAI APIs and Hugging Face, plus strong Python skills and familiarity with PyTorch, TensorFlow and scikit-learn.
- Proven experience building and deploying RAG architectures and vector-based retrieval (FAISS, Pinecone, Weaviate, OpenSearch) in production, working with data and services in AWS and Databricks, and deploying models using Docker, Kubernetes and cloud platforms.
- Strong understanding of evaluation metrics for NLP tasks and excellent problem-solving and communication skills, with the ability to explain complex topics to different stakeholders.

It is a plus if you have experience with prompt engineering and instruction-tuned models, fine-tuning domain-specific LLMs, responsible AI principles and model risk management, multi-agent orchestration frameworks (for example LangGraph or AWS Agent Core), and Databricks for processing and model serving. Experience from domains such as finance, healthcare or customer service chatbots is also beneficial.

Why join us?

You will work on cutting-edge GenAI projects with real-world impact for millions of customers in a department with a solid track record of scaled solutions. You will join a collaborative, cross-functional team with room for autonomy and a flexible working environment, and you will work in our new headquarters with great facilities.

Interested?

Apply now or reach out to Gry Bærentzen – CGBA@danskebank.dk for more information.

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Ansøgningsfrist

Løbende jobsamtaler
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