

GenAI Engineer

Would you like to use the latest advancements in LLMs and AI Agents to help solve the world's toughest water challenges?

Can you imagine building intelligent systems that help engineers quickly access and apply relevant knowledge? Or designing an AI agent that can leverage tools to support engineering workflows, for instance by visualizing scientific data or "see" and interpret complex scientific simulations?

We are looking for a GenAI Engineer to join our DHI team. You will play a pivotal role in bridging the gap between cutting-edge AI research and practical tools used by our clients and internally worldwide.

About DHI

As a "profit-for-purpose" organization, DHI has been committed to advancing and sharing knowledge around water environments for over 60 years. We work across the entire water cycle—from oceans and coastlines to groundwater to urban water and industry—to innovate new ways to use, manage, and protect water resources. <https://dhigroup.com/sustainability>

DHI is a global organization of more than a thousand people. We are a backbone of the Danish innovation system and a pioneer in physics-based water modeling software

([MIKEpoweredbyDHI](#)). In recent years, data and AI have unlocked new opportunities to approach problems differently. We see immense potential in augmenting our physics-based models by integrating data-driven solutions and machine learning which will help us tackle tomorrow's most pressing water challenges.

Short Teaser

Join our team that has already built AI solutions for engineering and environmental challenges. In this role, you will work at the intersection of software engineering, machine learning, and product development, building intelligent systems that integrate seamlessly with advanced simulation workflows. You will design robust AI solutions capable of handling complex scientific information from text, images, and graphs. You will help us move from "proof of concept" to production, whether through scalable cloud deployments or optimized offline solutions for remote environments.

Responsibilities and challenges

As a GenAI Engineer, you will play a key role in bridging the gap between cutting-edge AI research and real-world engineering applications, helping us modernize our tech stack and deliver scalable intelligent solutions.

The main responsibilities are:

- **Build Advanced RAG Systems:** Develop and optimize Retrieval-Augmented Generation pipelines that can ingest complex technical documentation, scientific papers, and geospatial data.
- **Agentic Workflows:** Design and orchestrate AI agents capable of tool calling, planning, and executing multi-step engineering tasks.
- **Hybrid AI Deployment (Cloud & Edge):** You will work across the spectrum—building scalable solutions on Azure (hosted models) while also optimizing Small Language Models (SLMs) to run offline on local Windows laptops for remote clients.
- **Multi-Modal Integration:** Work on systems that can interpret OCR data (Docling), scientific plots, and spatiotemporal visualizations.
- **Collaborate with engineers, developers, data scientists, IT, and security teams** to align tooling and integration efforts with business needs.
- **Production & Ops:** Move systems from demo to production. This includes setting up evaluations (LLM-as-a-judge), tracing, versioning, and ensuring security/compliance.
- **Empower the organization:** Act as a subject matter expert, helping onboard colleagues to GenAI best practices and demystifying the technology for domain experts.
- **Be curious:** Stay informed about developments in this fast-moving field.

Qualifications and personal skills

We are looking for a new colleague who will join us on our quest in solving the world's water problems and have the following qualifications:

Required:

- **Education:** BSc or MSc in Computer Science, AI, Software Engineering, or related field.
- **Experience:** 2+ years of professional experience in Software/ML Engineering. We value a strong portfolio or recent professional focus on GenAI/LLMs or NLP.

- **The GenAI Stack:** Hands-on experience with RAG, vector databases, and agentic orchestration. Familiarity with modern standards like MCP (Model Context Protocol) is a strong plus.
- **Python Proficiency:** You write clean, modular Python. Knowledge of data validation libraries (e.g., Pydantic) is a plus.
- **Deployment & Ops:** Experience with API integration (REST), Docker, Git-based workflows, and CI/CD pipelines.
- **LLMOps & Observability:** Experience with tracing inputs/outputs, live monitoring, and implementing automated evaluation pipelines.
- **Language:** Full proficiency in English (written and spoken).

Desirable

- **Local Inference:** Experience with model quantization (GGUF, AWQ) and runners like Ollama, vLLM, or Llama.cpp.
- **Fine-Tuning:** Experience fine-tuning Small Language Models (SLMs) using efficient techniques (e.g., LoRA or similar) to adapt models to specific domains.
- **Advanced Tooling:** Experience with workflow automation tools (e.g., n8n).
- **Linux & CLI Proficiency:** Comfortable working in headless Linux environments, managing remote servers, and scripting via the command line.
- **Frontend/Prototyping:** Ability to create simple interactive prototypes (e.g., using Streamlit or Gradio) to showcase AI workflows; experience with web frameworks like React is a plus.
- **Knowledge Graphs:** Understanding of graph theory/GraphRAG.
- **Domain Interest:** Curiosity about environmental science, physics, or simulation data.

We offer

To work at DHI means being part of an organisation that is the global leader in solving the world's toughest challenges in water environments. We will offer you:

- **Meaningful impact:** Contribute to solutions that support global water sustainability and climate resilience.
- **A purpose-driven, innovative workplace:** DHI combines 60+ years of water expertise with modern data and AI technologies to address environmental challenges.
- **A central role in shaping GenAI at DHI:** Influence the design, architecture, and deployment of next-generation AI capabilities across our products and services.
- **A truly international environment:** Work with talented colleagues across the globe (our team of 12 currently represents 8 nationalities).
- **Professional and personal development:** We empower our people with room to grow, innovate, and take responsibility while upholding high technical and ethical standards.
- **Opportunities for conference participation and continued upskilling** in a rapidly evolving field.
- **Flexible working conditions** that support a healthy work-life balance.

Office location

You will be based in our office in Hørsholm, Denmark. We work in a hybrid model, allowing you to work from home a few days per week.

How to apply

- Please submit your application including CV via the relevant job posting on DHI's website: <http://www.dhigroup.com/careers>
- Deadline for application is January 11, 2026
- For further information please contact **Clemens Cremer**, clcr@dhigroup.com