



7 Courses

**Generative AI and LLMs:  
Architecture and Data  
Preparation**

**Gen AI Foundational Models  
for NLP & Language  
Understanding**

**Generative AI Language  
Modeling with Transformers**

**Generative AI Engineering  
and Fine-Tuning  
Transformers**

**Generative AI Advance Fine-  
Tuning for LLMs**

**Fundamentals of AI Agents  
Using RAG and LangChain**

**Project: Generative AI  
Applications with RAG and  
LangChain**



Oct 17, 2025

**Ishant Tiwari**

has successfully completed the online, non-credit Specialization

# IBM Generative AI Engineering with LLMs

In this Specialization, learners developed essential knowledge and skills to perform tasks in an AI or NLP Engineer role. The Certificate holder has demonstrated a firm grasp and has practical experience of the various generative AI architectures and LLMs for developing NLP-based systems. They have demonstrated knowledge of tokenization, data loaders, transformers, attention mechanisms, and prompt engineering. They have gained experience in frameworks and LLMs, such as GPT and BERT. The Certificate holder can use PyTorch and the Hugging Face Transformers library to develop RAG applications such as a question-and-answering system. They can also use document loaders in LangChain to bring in information from various sources and prepare it for processing.

The online specialization named in this certificate may draw on material from courses taught on-campus, but the included courses are not equivalent to on-campus courses. Participation in this online specialization does not constitute enrollment at this university. This certificate does not confer a University grade, course credit or degree, and it does not verify the identity of the learner.

Joseph Santarcangelo,  
Roodra Pratap Kanwar,  
Fateme Akbari  
Sina Nazeri, Kang  
Wang, Ashutosh Sagar  
Wojciech 'Victor' Fulmyk

Verify this certificate at:

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