**Building Generative AI Applications with Large Language Models**

**Generative AI Applications Stack: Transformer, LLMs, Vector Database**

**Hands-on for Generative AI Engineer | Building AI Application with Large Language Models**

**Hands-on Generative AI Engineering with Large Language Models | Building quick GenAI web-applications**

Part I: Introduction to Transformer – Attention Is All You Need

Part II: Implementing of Transformer in Python and PyTorch

Part III: NLP with Hugging Face ecosystem

               Introduction

               Load datasets

               Load models

               Fine-tune

               Evaluate

Part IV: Components to build NLP web-applications with LLMs

Open source / Private LLM

Embedding

Vector database

Prompt Engineering

LangChain / LlamaIndex

Streamlit / Gradio

Part V: Building +10 NLP web-applications with LLMs

               Chatbot

               AI Assistants

               Retrieval Augmented Generation (RAG)

               Agent

Part VI: Serving LLM web applications

Backend: Python, LangChain, OpenAI API

Frontend: Python, Gradio

REST API: FastAPI

Docker: Docker Desktop, Dockerfile, Docker-compose