LLM Basics

Varighed: 2 Days   Kursus Kode: GK840035   Leveringsmetode: Virtuel deltagelse

Beskrivelse:

This course provides a comprehensive introduction to Large Language Models (LLMs), focusing on what they are, how to build them using PyTorch, and how to use them for inference in language tasks. Participants will learn about the history of LLMs, how LLMs fit into the larger AI/Generative AI landscape, neural-network-based language models, and how to use RNNs, LSTMs, and transformers for natural language processing tasks.

Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

Målgruppe:

- AI/ML Enthusiasts interested in learning about NLP (Natural Language Processing) and Large Language Models (LLMs).
- Data Scientists/Engineers interesting in using LLMs for inference and finetuning
- Software Developers wanting basic practical experience with NLP frameworks and LLMs
- Students and Professionals curious about the basics of transformers and how they power AI models

Agenda:

- Working with an engaging, hands-on learning environment, and guided by an expert instructor, students will learn the basics of Large Language Models (LLMs) and how to use them for inference to build AI powered applications.

- Understand the basics of Natural Language Processing

- Implement text preprocessing and tokenization techniques using NLTK

- Explain word embeddings and the evolution of language models

- Use RNNs and LSTMs for handling sequential data

- Describe what transformers are and use key models like BERT and GPT

- Understand the risks and limitations of LLMs

- Use pre-trained models from Hugging Face to implement NLP tasks

- Understand the basics of Retrieval-Augmented Generation (RAG) systems

Forudsætninger:

- Proficiency in Python programming
- Familiarity with data analysis using Pandas

Indhold:

1) Introduction to NLP

- What is NLP?
- NLP Basics: Text Preprocessing and Tokenization
- NLP Basics: Word Embeddings
- Introducing Traditional NLP Libraries
- A brief history of modeling language
- Introducing PyTorch and HuggingFace for Text Preprocessing
- Neural Networks and Text Data
- Building Language Models using RNNs and LSTMs

2) Transformers and LLMs

- Introduction to Transformers
- Using Hugging Face's Transformers for inference
- LLMs and Generative AI
- Current LLM Options
- Fine tuning GPT
- Aligning LLMs with Human Values

Retrieval-Augmented Generation (RAG) Systems

Flere Informationer:

For yderligere informationer eller booking af kursus, kontakt os på tlf.nr.: 44 88 18 00

training@globalknowledge.dk

www.globalknowledge.com/da-dk/

Global Knowledge, Stamholmen 110, 2650 Hvidovre