



Delphi and AI

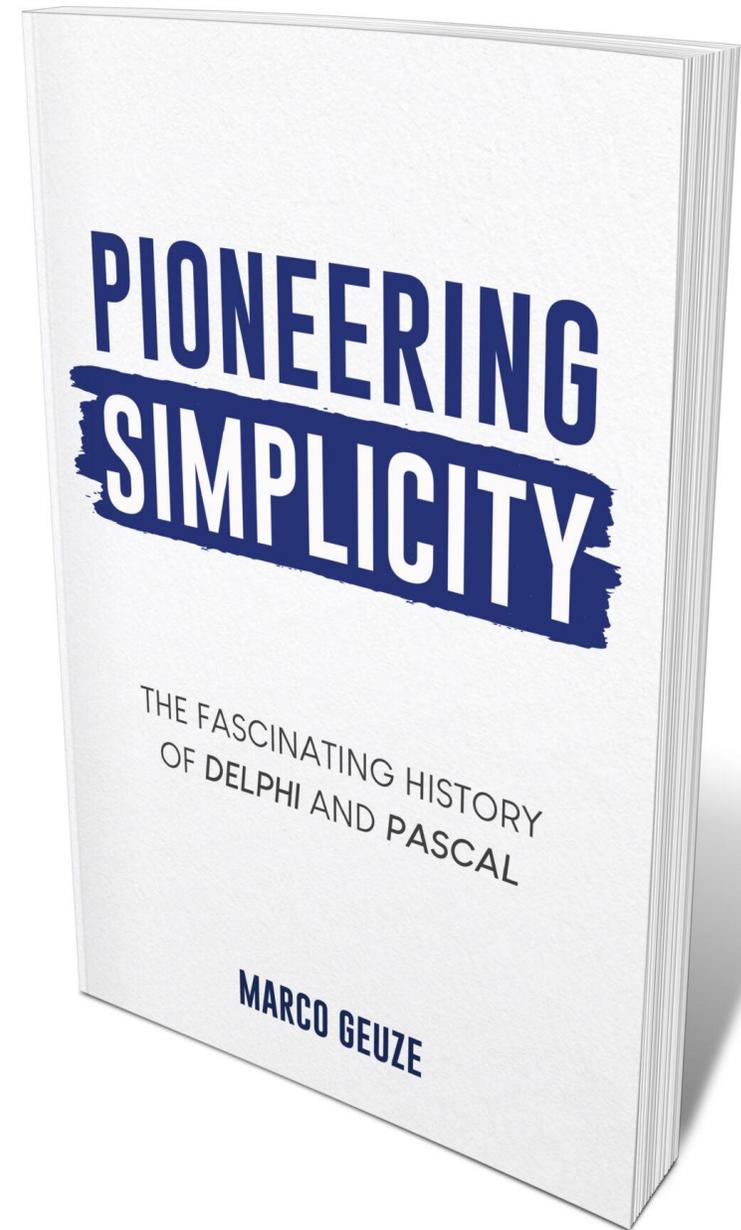
Beyond the hype - Delphi, AI and the future

Marco Geuze

GDK Software

- Marco Geuze – Embarcadero MVP
- Long-time Delphi developer
- Founder of GDK Software:
 - +30 Delphi developers worldwide
 - Offices in NL, UK, US and Brazil
 - Codolex
 - Delphi Summit -> June 2025 <https://delphisummit.com>

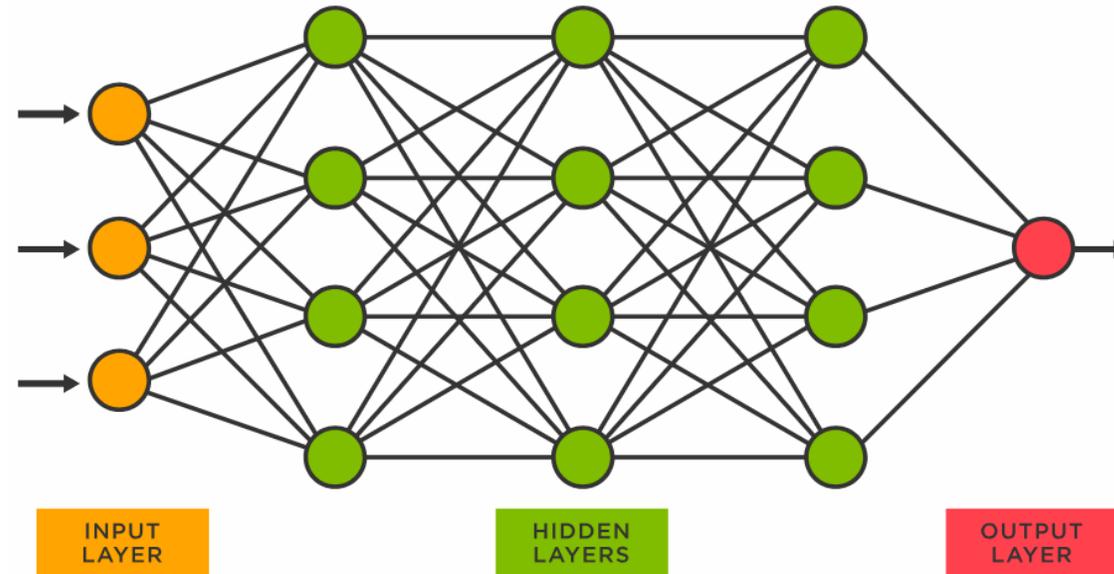
Pioneering Simplicity



Concepts

- LLM
- Prompting
- Embeddings
- Vector databases
- Retrieval-Augmented Generation
- Agents
- Fine-tuning

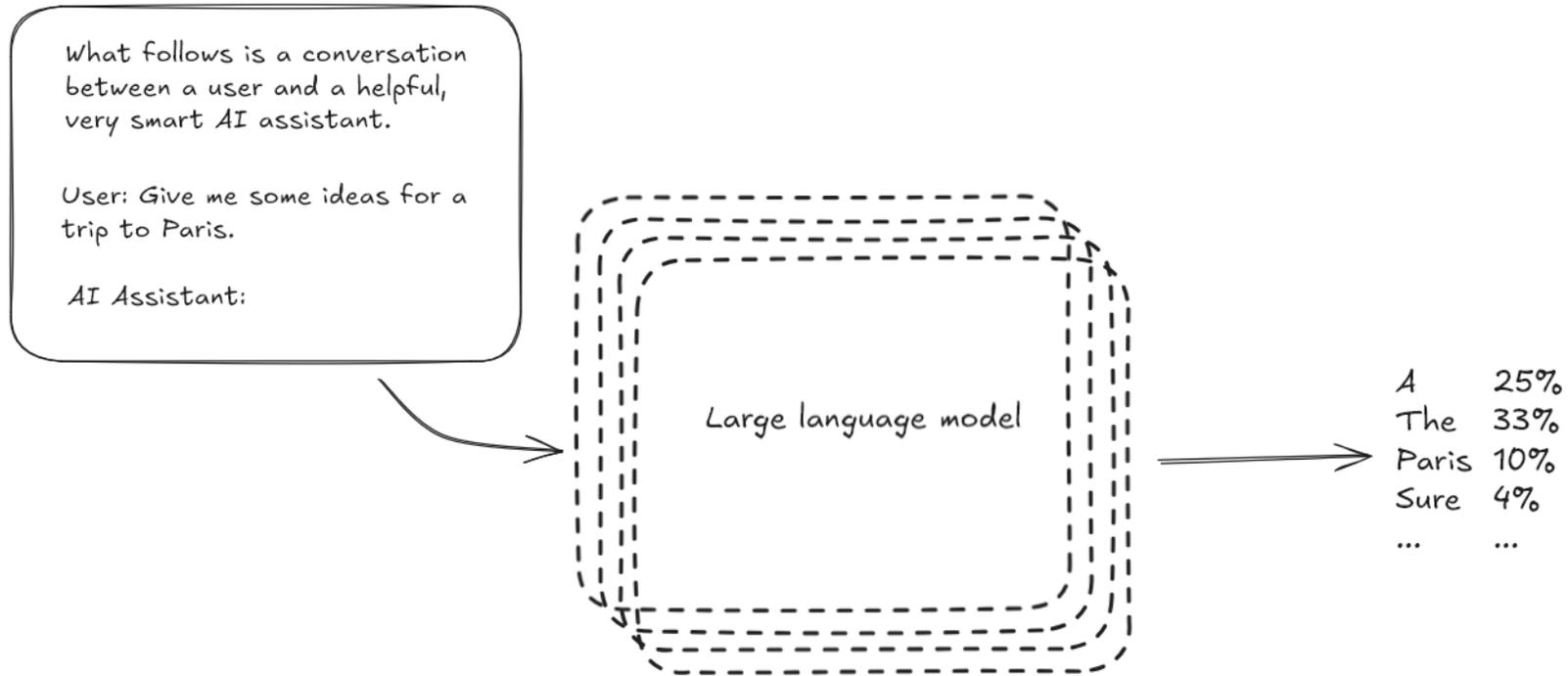
Large Language Models



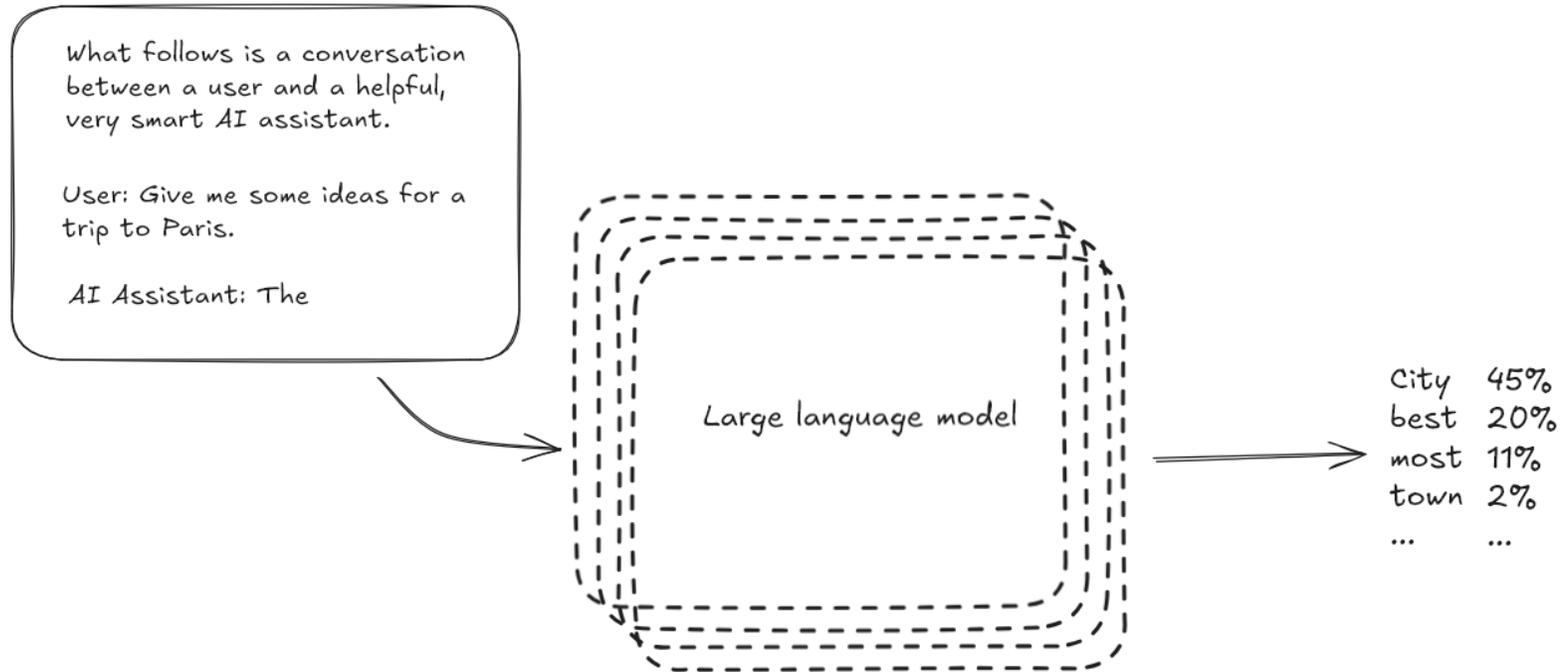
Large Language Models

- Pre-training → Base Model
- Supervised Fine-Tuning (SFT) → Instruct Model (via special tokens like <|user|>)
- RLHP (Reinforcement Learning with Human Feedback)

Large Language Models



Large Language Models



Large Language Models

Tokens

Vectors

Token count

9

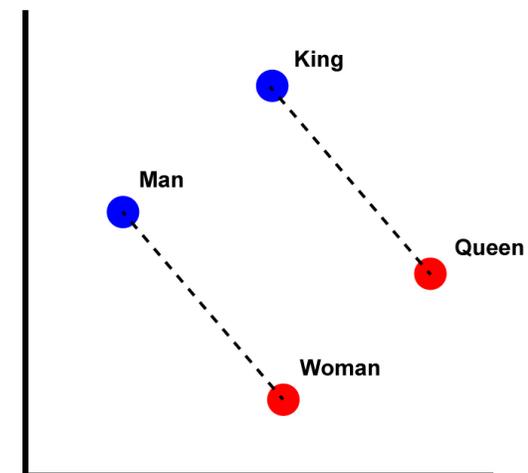
This is the AI Training for Delphi developers

2028, 374, 279, 15592, 16543, 369, 7462, 17247, 13707

Large Language Models

Embeddings:

- Numerical representations of text in vector space
- Capture semantic meaning and relationships
- Allow computers to "understand" similarity between concepts
- Example: "king" - "man" + "woman" \approx "queen"



Getting started

- Local
 - Ollama
 - LangChain
 - llama.cpp
- Cloud based
 - RunPod
 - Hugging Face
 - Open AI
 - Claude AI
 - And many, many more

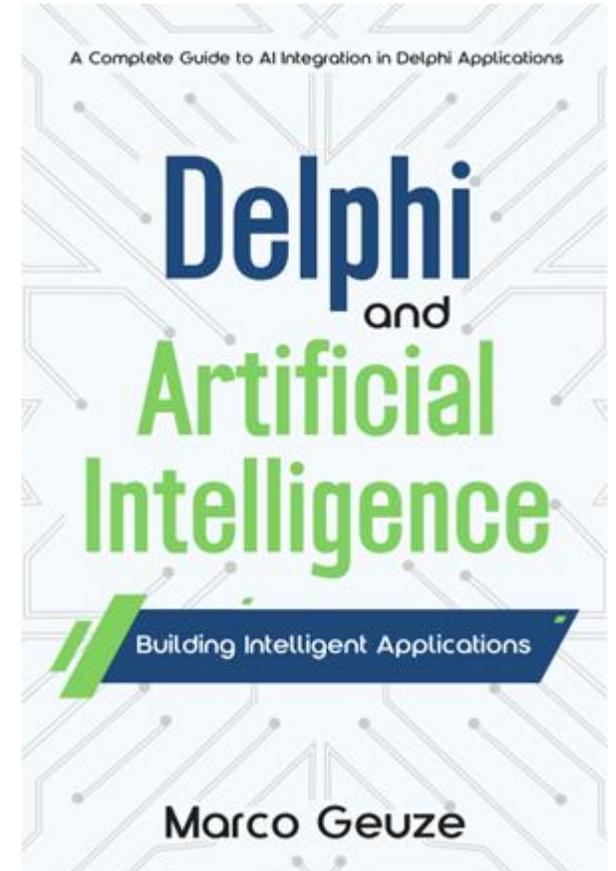
Large Language Models

Demo:

- Working with Ollama
- Embeddings and vector databases
- RAG

AI Training – 23 May in London

training.gdksoftware.com



Q&A

