

# How to Make Private Data Accessible to a Chatbot

Knowledge Sharing | AI Community  
04.07.2024

T Systems

Let's power  
higher performance





**ConMob AI**

# Who are we?

Driving innovation and collaboration in AI within the ConMob team.

- **Our Mission**

- Share AI knowledge and experiences
- Generate new AI ideas
- Excite others about AI's possibilities
- Enhance competitive advantage with AI

- **Our Team**



• Alexander Stiefel



• Rania Rojbi



• Lincoln Bacchus



• Yuliia Kruhlyk



• Lars Jonuscheit



Our Community

# Agenda



01 **The Why**



02 **Key Components**



03 **Our Implementation**



04 **Performance Challenges**



05 **What is next?**



Our Community

01

# The Why

## The Why

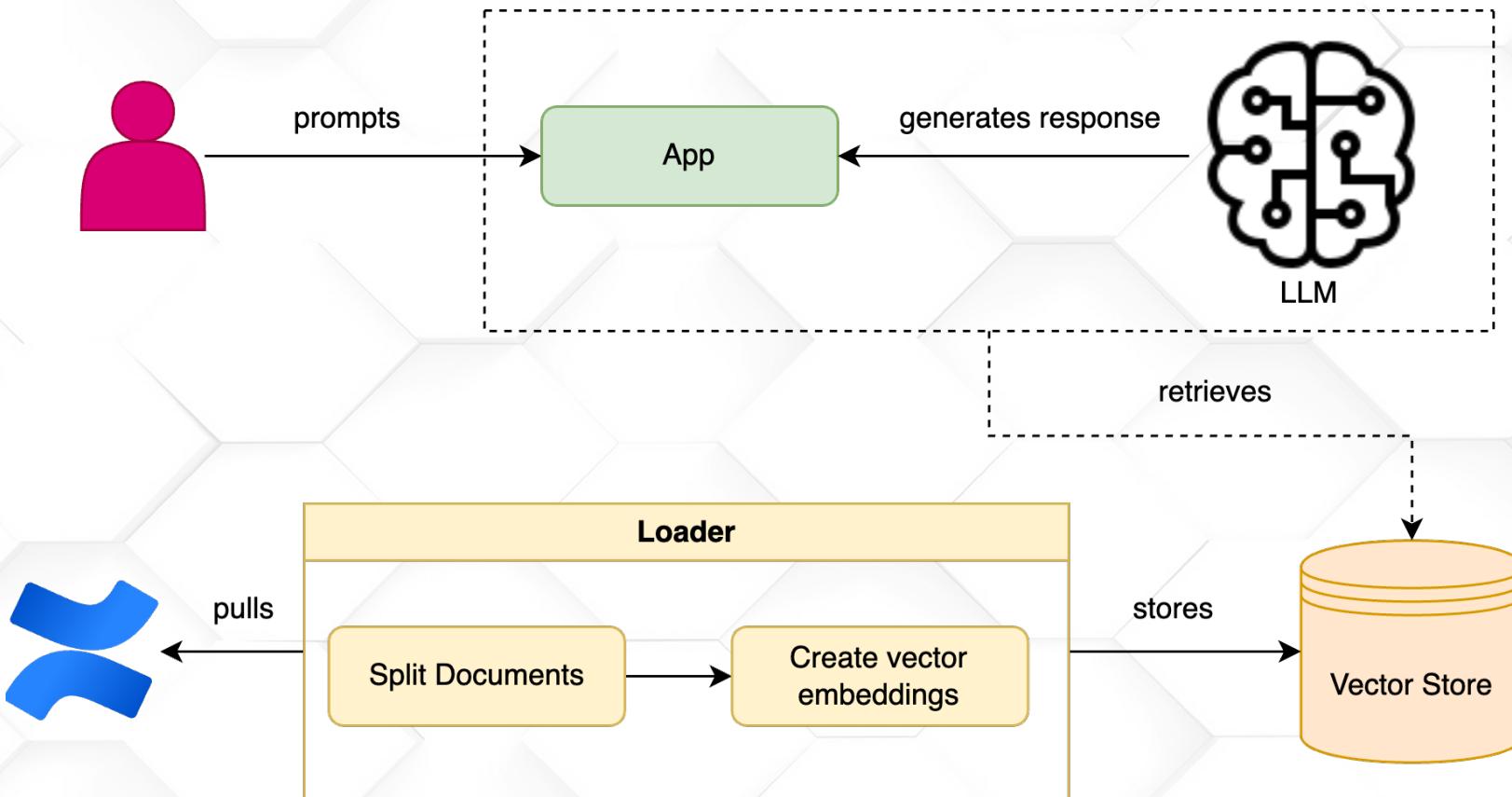
- 1 Ensuring Data Privacy and Control
- 2 Managing an Overwhelming Volume of Data
- 3 Difficulty in Locating Information Efficiently
- 4 Summarizing Extensive Documents
- 5 Overcoming Language Barriers
- 6 Streamlining Onboarding Processes



02

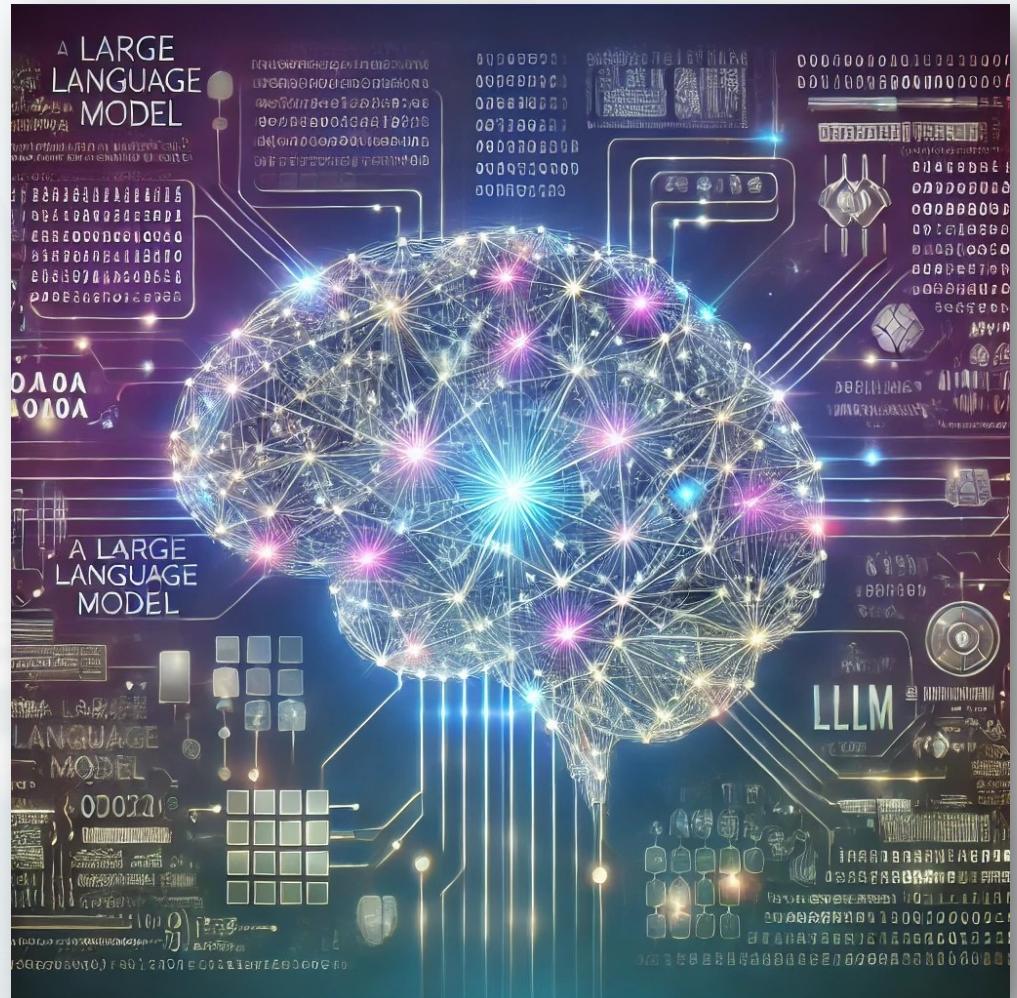
# Key Components

# Overview

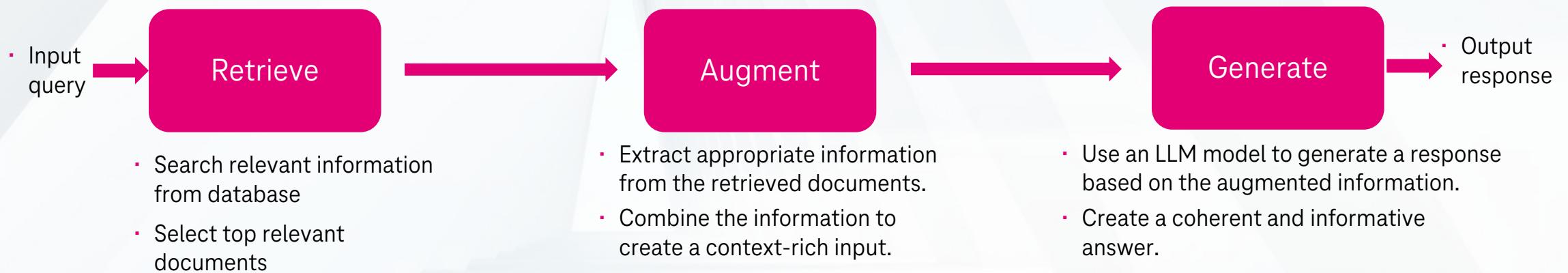


# Understanding the Large Language Models (LLMs)

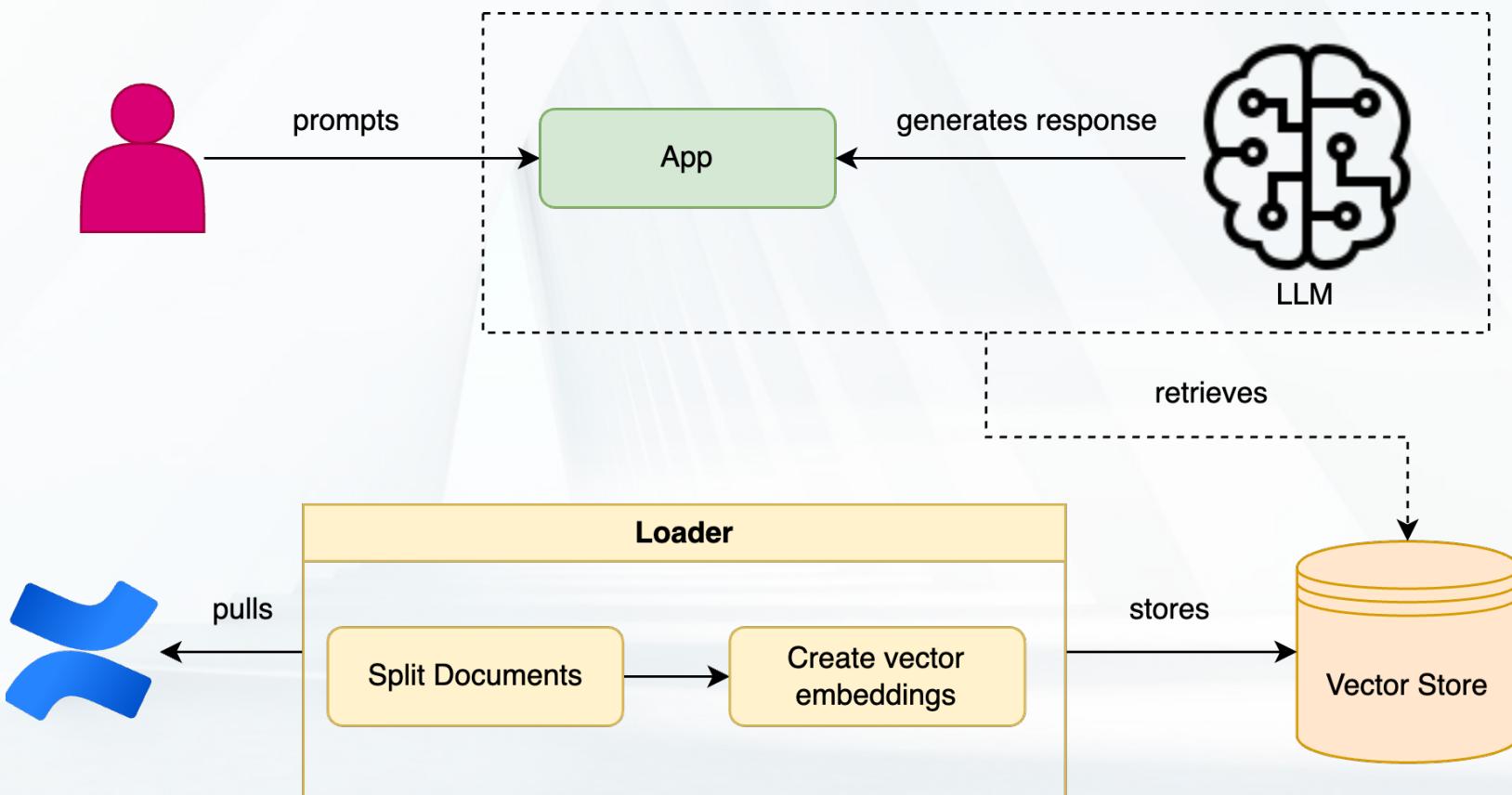
- Predicts the next word in a sentence or text.
- Can generate text, translate languages, write creative content, and answers questions in an informative way.
- Used in Chatbots, translation, code generation, summarization...



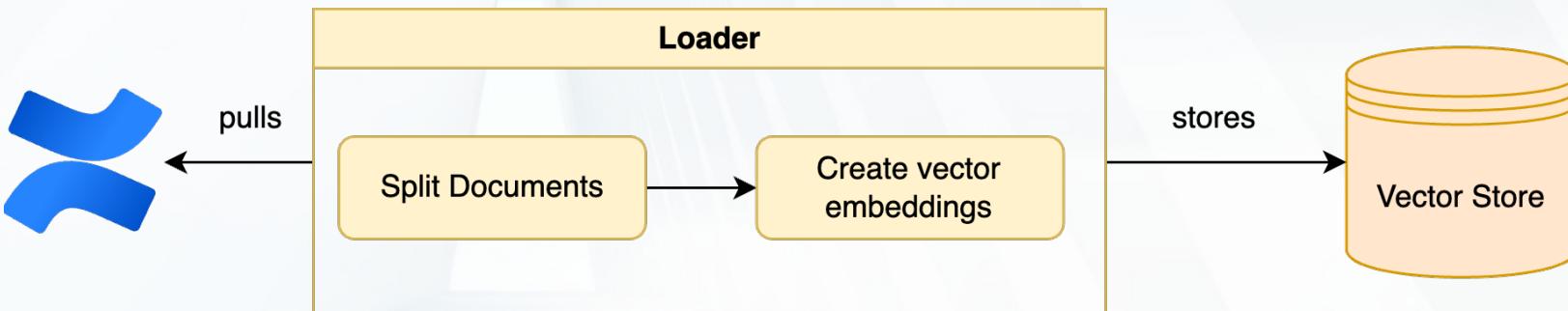
# Retrieval Augmented Generation (RAG)



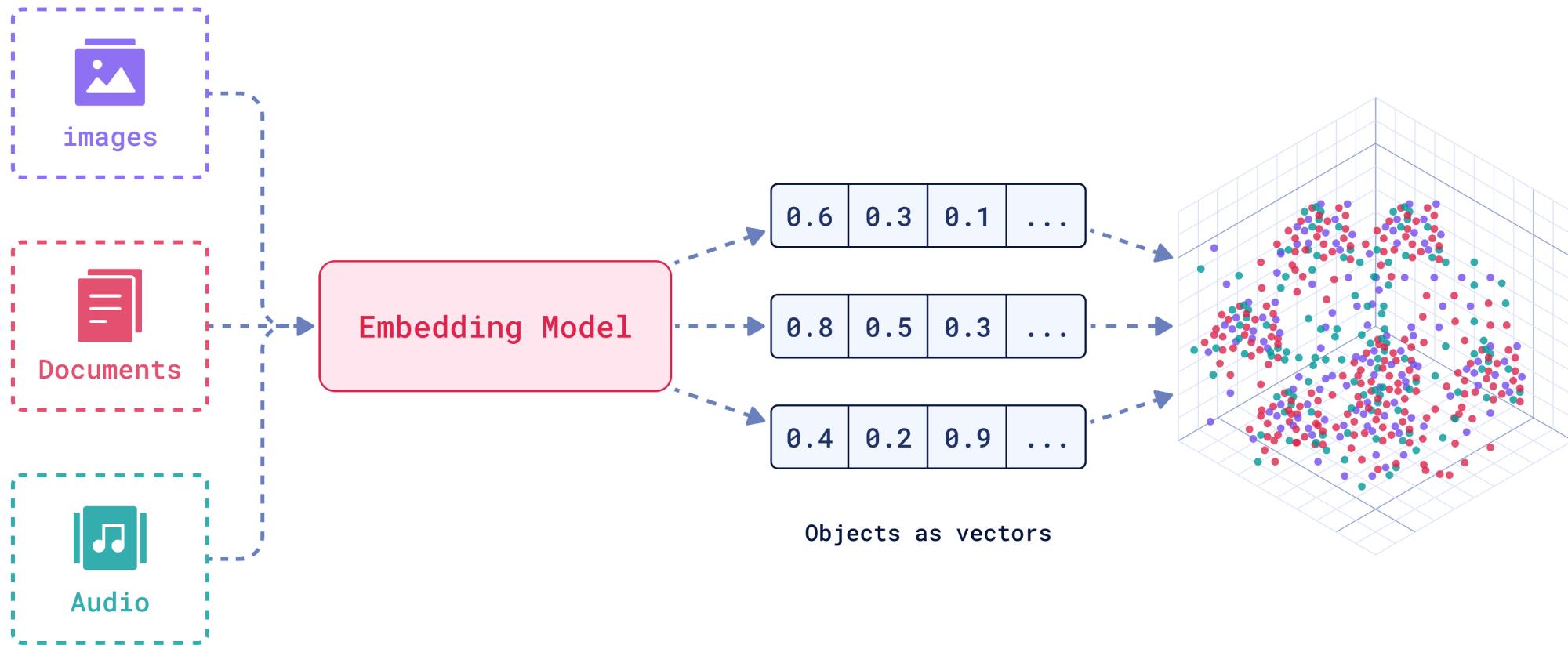
# Overview



# Overview



# Vector stores



# Vector Store

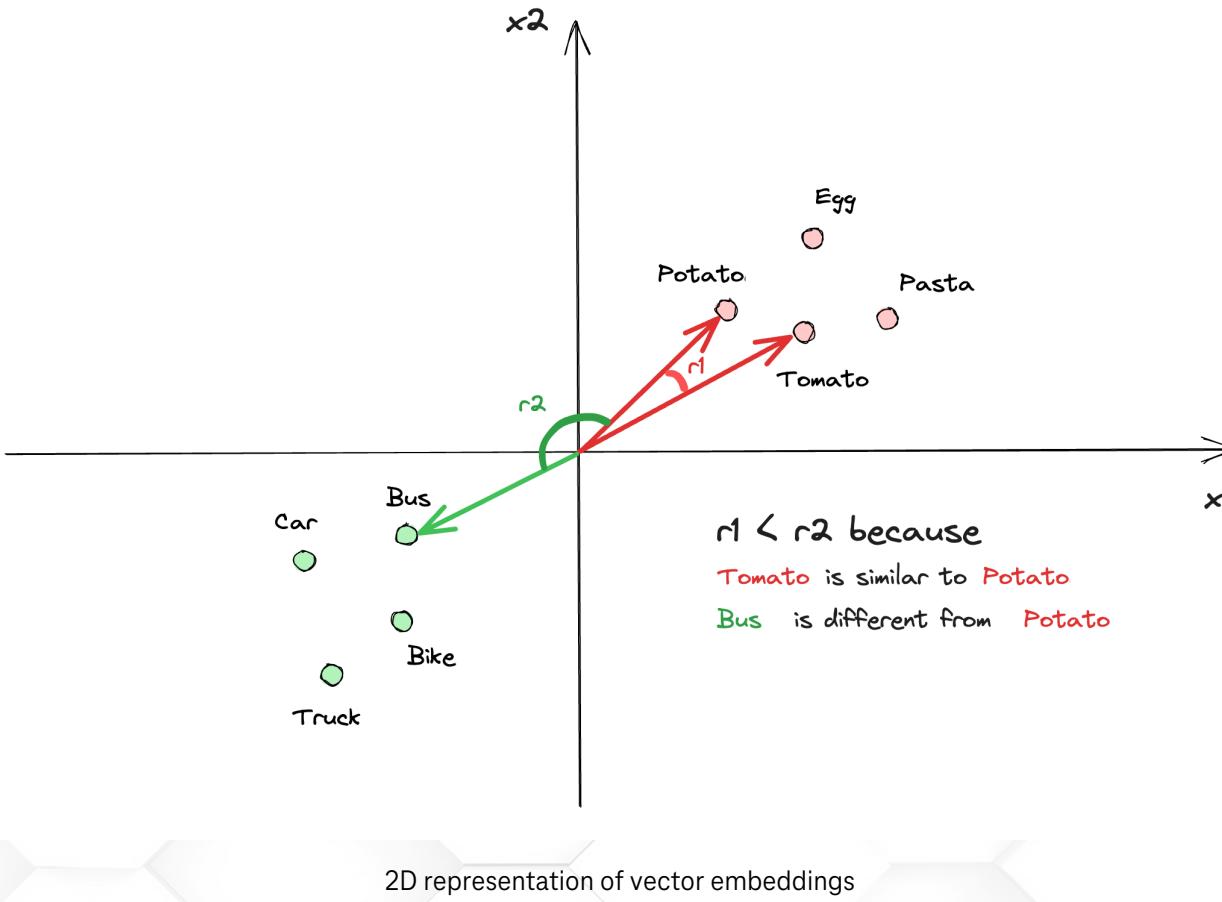
```
▼ {  
  ▶ "_id": {□},  
  "textContent": "Jörg Tischler, Business Unit Lead in Connected Mobility, on what SDV is: The SDV Tri  
  ▶ "vectorContent": [□],  
  "title": "SDV Tribe",  
  "id": "116916331",  
  "source": "https://strive.devops.t-systems.net/confluence/display/SDV/SDV+Tribe",  
  "when": "2024-06-17T11:29:39.161+02:00"  
}  
...
```



```
▼ {  
  ▶ "_id": {□},  
  "textContent": "Jörg Tischler, Business Unit Lead in Connected Mobility, on what SDV is: The SDV Tri  
  ▶ "vectorContent": [  
    -0.0004876615237484676,  
    -0.027342081901527072,  
    -0.0007598359666148163,  
    0.030321358490987133,  
    0.007274002493798148,  
    0.015100613598308804,  
    0.013010313243795918,  
    0.04500150883371244,  
    0.0074241680087438625,  
    0.01230153395040303,  
    0.02305336209624619,  
    -0.030273305973239323,  
    -0.020398442795551464,  
    -0.028543402295802628,  
    0.026621288547374694,  
    -0.008481330849775988,  
    0.024891384869937996,  
    0.03885074185851093,  
    0.0354389907466755,  
    0.0077545313965664015,  
    0.05953750162319433,  
    0.012950247596611156,  
    0.025227754356817744,  
    0.051752937868696815,  
  ]  
}
```



# Vectors



## What is Langchain?

- A framework for developing applications powered by LLMs.

03

# Our Implementation

## Our Choices

- 1 LLM: Azure Openai GPT 4 Turbo
- 2 Vectore store: Azure CosmosDB for MongoDB
- 3 Framework: Langchain

# Demo

04

# Performance Challenges

# Challenges

- 1 Splitting of documents / Chunking
- 2 Quality of the input documents

05

What is next?

# What is next?

1

askGenie



2

Active AI community

Our Community



Best practices



3

Data quality in confluence

# What is next?

2

## Active AI community

**T Systems** Spaces ▾ People Calendars Create ...

Pages / SDV - Software Defined Vehicle

Software Defined Vehicle

Blog

PAGE TREE

- SDV Tribe Home
- Connected Mobility Home
  - ConMob\_Responsibilities
  - ConMob\_Onboarding
  - ConMob\_Offboarding
  - ConMob\_News
  - ConMob AI
    - AI - Curated List
    - AI - Engineer Feedback June 2024
    - AI - Idea Collection
    - Top 10 Things to know about Gen AI in 2024
  - Meeting Guidelines
  - Teleoperations
  - Customer Projects
  - Random
  - Create a Knowledge Artifact

Connected Mobility Home

ConMob AI

Created by SDCloud Admin, last modified by Lars Jonuscheit on Jun 26, 2024



### Introduction

Welcome to our ConMob AI! The gateway to the world of artificial intelligence in our ConMob team!

Our goal is to drive innovation, share knowledge, and collaborate together using cutting-edge technologies.

### Our Objectives

- Share knowledge and experiences in the Connected Mobility Team about the use of AI
- Generate new ideas for the application of AI
- Excite others about the possibilities of the use of AI in our daily work life
- Improve our competitive advantage by leveraging AI for our products

Our Community



# What is next?

1

askGenie



2

Active AI community

Our Community



3

Data quality in confluence

Best Practices



# Q & A

# ConMob AI Community

Knowledge Sharing  
04.07.2024

T Systems

Let's power  
higher performance

