

- openHPI: ChatGPT: Was bedeutet generative KI für unsere Gesellschaft? -

# Conversational AI

Johannes Hötter  
Christian Warmuth

# Fallstudie: Vergleich ChatGPT vs. Perplexity

## Beispiel ChatGPT



Explain an ETF to me like I'm five years old



Okay kiddo, so imagine you have a bunch of toys like dolls, cars, and blocks.

Now, let's say you want to share your toys with your friends and make a bigger collection of toys. You can do this by putting all your toys in a big toy box that you and your friends can use whenever you want.

An ETF (which stands for Exchange-Traded Fund) is kind of like a big toy box for grown-ups who want to invest their money in lots of different things, like stocks and bonds. Instead of toys, an ETF holds a bunch of different investments.

Just like you and your friends can take turns playing with the toys in the toy box, people can buy and sell shares of an ETF on the stock market. And when lots of people buy shares of the ETF, the value of the ETF goes up, just like when lots of people want to play with a toy, its value goes up too.

So, an ETF is like a big toy box for grown-ups who want to invest their money in lots of different things, and they can buy and sell shares of it on the stock market.

Hat ein trainiertes "Weltwissen",  
prognostiziert Wort für Wort.

## Beispiel Perplexity (Konkurrent zu OpenAI)

Explain an ETF to me like I'm a five-year-old

[PERPLEXITY](#)

Okay, so imagine you have a bunch of toys, and you want to keep them safe and make sure they grow in value. An ETF is like a big toy box that holds lots of different toys, and you can buy a piece of that toy box. When the toys inside the box grow in value, the toy box grows in value too, and you can sell your piece of the toy box for more money than you paid for it. It's a way to keep your money safe and make it grow by investing in lots of different things at once.

1 reddit 2 howtogeek 3 reddit 4 linkedin 5 medium

Schaut zunächst im Internet nach  
Quellen, bezieht diese ein, und  
prognostiziert dann mit dem trainierten  
"Weltwissen"

## Conversational AI

Johannes Hötter,  
Christian Warmuth

openHPI

# Fallstudie: Vergleich ChatGPT vs. Perplexity

## Explain an ETF to me like I'm a five-year-old

PERPLEXITY

Okay, so imagine you have a bunch of toys, and you want to keep them safe and make sure they grow in value. An ETF is like a big toy box that holds lots of different toys, and you can buy a piece of that toy box. When the toys inside the box grow in value, the toy box grows in value too, and you can sell your piece of the toy box for more money than you paid for it. It's a way to keep your money safe and make it grow by investing in lots of different things at once.

1 reddit 2 howtogeek 3 reddit 4 linkedin 5 medium

Ein User kann im Zweifel prüfen,  
ob eine Antwort stimmt.  
Außerdem ist die Qualität der  
Antwort im Allgemeinen höher.

**Sources**

reddit

1. Can someone explain to me what an ETF is like I'm five?  
Assuming a five year old knows about stocks, here's my best effort: An ETF is most commonly referred to as a basket of stocks. ETFs mostly centralize around one theme, industry (Banking, construction), index (something like the S&P500), or sector (retail, consumer goods).

howtogeek

2. What Does "ELI5" Mean, and How Do You Use It? - How-To Geek  
"Explain Like I'm 5"

reddit

3. Explain to me like a 5-year-old ETF in USA/Europe : ETFs - Reddit  
In theory but who knows what can happen. Tentatively I'd like this money to go towards my retirement and money that I will not be touching in the foreseeable future. Question: I basically want to put this money into some ETFs. I'm really keen on splitting it into two or three ETFs and have this money grow exponentially until retirement.

linkedin

4. Explain it to me like I am a 5-year-old: Fundamental Analysis ...  
Feb 13, 2019 · Metaphorically speaking, if we consider our human body then what we eat i.e. our diet can be called as fundamental analysis and what type of exercises we do can be called as technical analysis ...

medium

5. Explain it to me like I am a 5 year old: Derivatives ... - Medium  
Jan 19, 2019 · Explain it to me like I am a 5 year old: Derivatives (Futures, Forwards, Swaps, Options) I am a graduate student pursuing Masters in Computer Science from NYU wanting to understand...

+ Add More Sources

Cancel

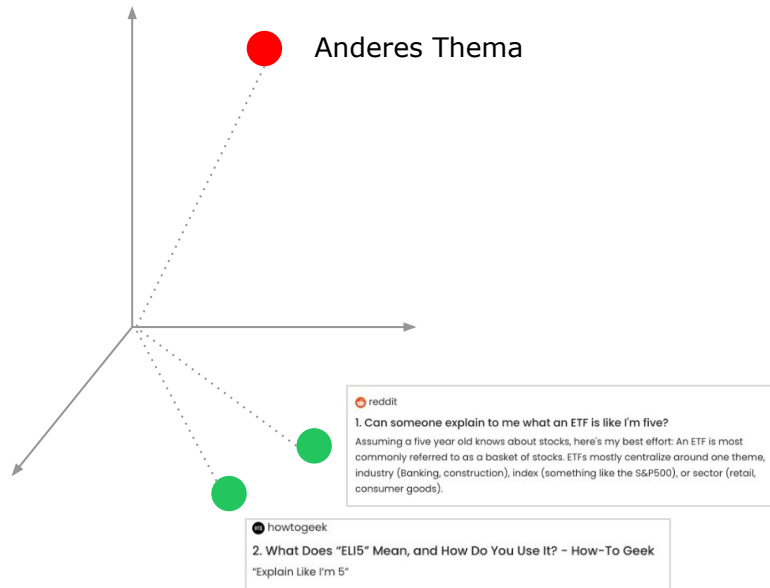
Done

## Conversational AI

Johannes Hötter,  
Christian Warmuth

openHPI

# Wie funktioniert das?

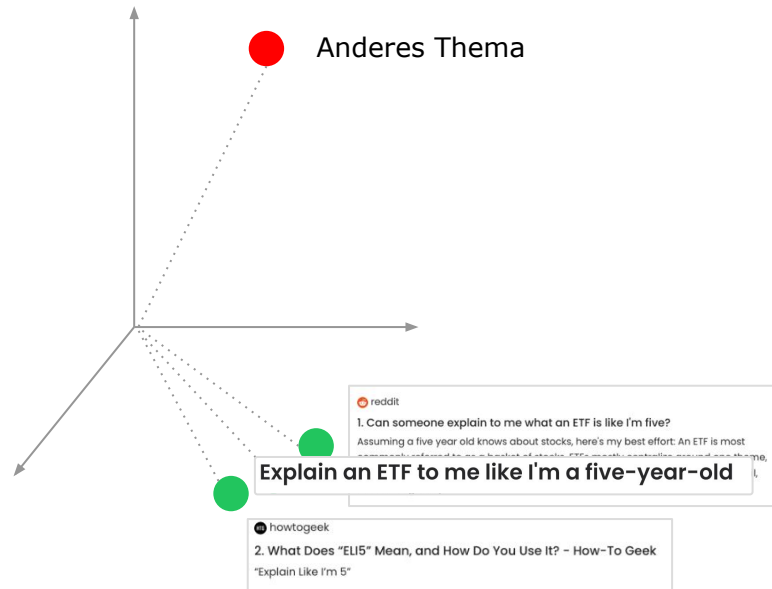


## Conversational AI

Johannes Hötter,  
Christian Warmuth

openHPI

# Wie funktioniert das?

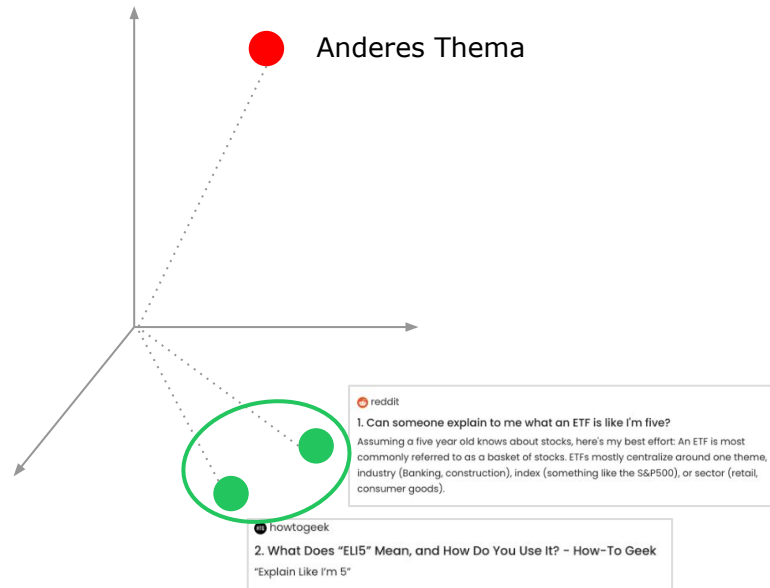


## Conversational AI

Johannes Hötter,  
Christian Warmuth

openHPI

# Wie funktioniert das?



## Conversational AI

Johannes Hötter,  
Christian Warmuth

openHPI

# Wie funktioniert das?

Explain an ETF to me like I'm a five-year-old

+

reddit

1. Can someone explain to me what an ETF is like I'm five?

Assuming a five year old knows about stocks, here's my best effort: An ETF is most commonly referred to as a basket of stocks. ETFs mostly centralize around one theme, industry (Banking, construction), index (something like the S&P500), or sector (retail, consumer goods).

+

howto geek

2. What Does "ELI5" Mean, and How Do You Use It? - How-To Geek  
"Explain Like I'm 5"

ChatGPT

Okay, so imagine you have a bunch of toys, and you want to keep them safe and make sure they grow in value. An ETF is like a big toy box that holds lots of different toys, and you can buy a piece of that toy box. When the toys inside the box grow in value, the toy box grows in value too, and you can sell your piece of the toy box for more money than you paid for it. It's a way to keep your money safe and make it grow by investing in lots of different things at once.

1 reddit 2 howto geek 3 reddit 4 linkedin 5 medium

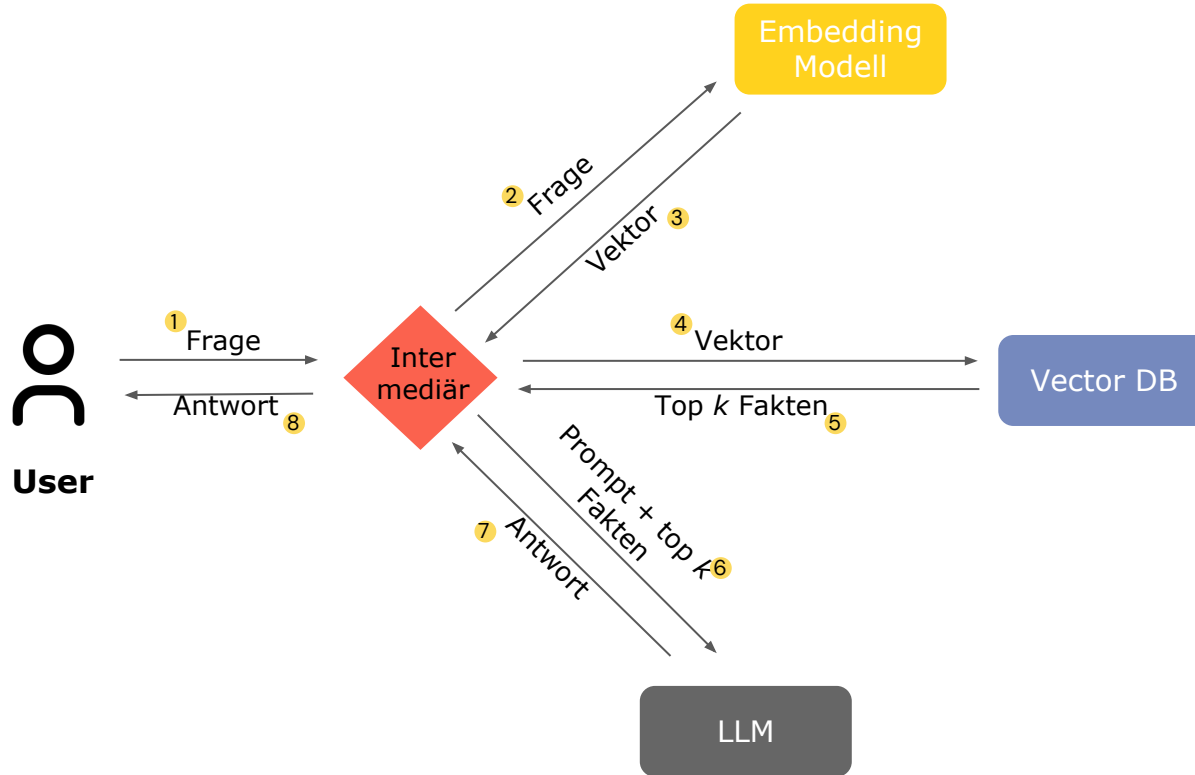


**Conversational AI**

Johannes Hötter,  
Christian Warmuth

openHPI

# Wie funktioniert das?



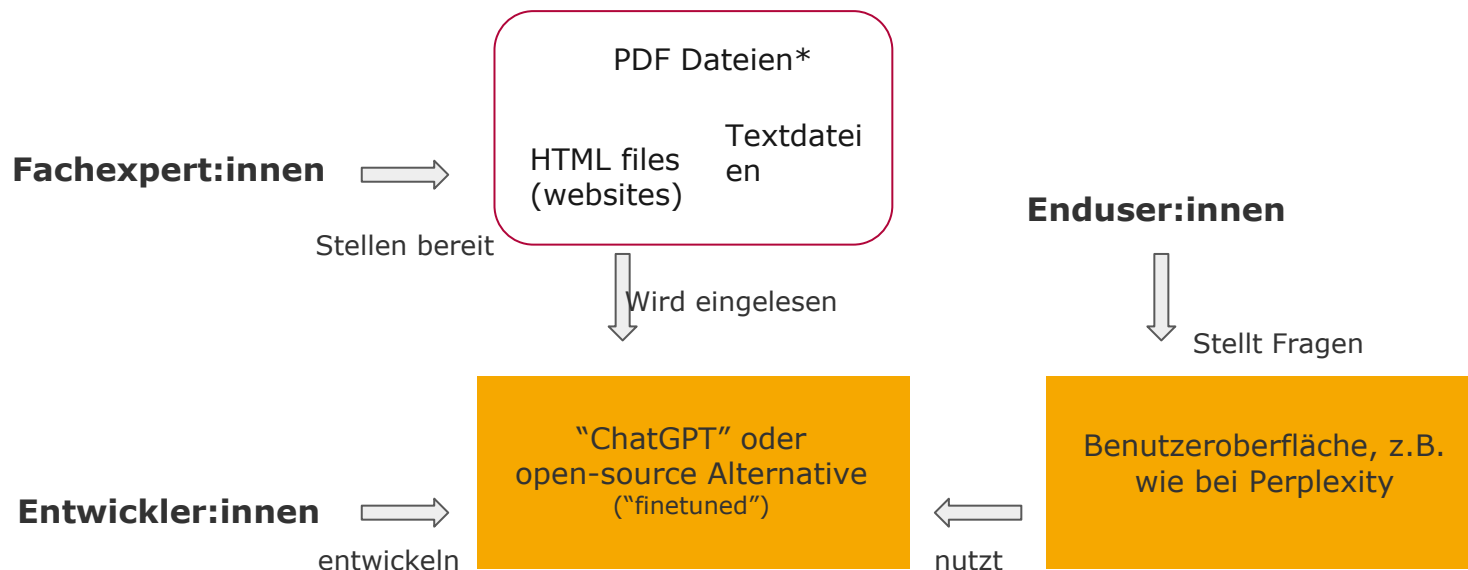
## Conversational AI

Johannes Hötter,  
Christian Warmuth

openHPI



# Wie kann man sowas bauen?



\*PDF-Dateien mit langen Texten (z. B. Verträge, Produktbeschreibungen, Richtlinien) sind i.d.R. besser geeignet als Dateien mit vielen wechselnden Layouts (z. B. Rechnungen)

# Wie kann man sowas bauen?

Das Open-Source-Modell wird auf zwei Arten trainiert:

- Es lernt über das bereitgestellte Wissen (PDF-Dateien, Textdateien, ...).
- Es lernt, gefundene Fakten im Kontext der Frage zu präsentieren.

Die Personalisierung kann im Laufe der Zeit trainiert werden, z. B. durch explizites oder implizites Benutzerfeedback.

- Implizit: Der User schreibt eine positive Antwort ("Danke", "Toll", ...) oder klickt auf den "Daumen hoch/runter"-Button.
- Explizit: In einer speziellen Trainingsphase generiert das Modell 3 mögliche Antworten, und Enduser geben Rückmeldung, welche Antwort die beste Option war.

## **Conversational AI**

Johannes Hötter,  
Christian Warmuth

openHPI

# Warum ist dieses Vorgehen interessant?

## Vorteile

- Antworten können mit Fakten belegt werden
- “Weltwissen” einfach ergänzen (*muss ein LLM alles wissen, oder kann man zur Laufzeit relevante Fakten einfach ergänzen?*)
- Sehr einfach zu ergänzen, auch von Nicht-Programmierenden: einfach weitere PDFs etc. zur Faktenbasis hinzufügen
- Konversationsdaten wiederum Intellectual Property

## Trend

Muss ein LLM überhaupt alles wissen? Oder reicht es, wenn z.B. zur Laufzeit durch Prompt Engineering weiterer Kontext hinzugefügt werden kann?

-> mehr in Woche 3

## Conversational AI

Johannes Hötter,  
Christian Warmuth

openHPI

- openHPI: ChatGPT: Was bedeutet generative KI für unsere Gesellschaft? -

# Conversational AI

Johannes Hötter  
Christian Warmuth