Whoa! Awesome!

"AI-Chatbot for Libraries and Institutions Part II — Prompting and Conversations"



"Expectation Management"

- We are still in the "faster horse" moment*. We think of AI as a new gadget or some kind of search tool. We are thinking of AI-Chatbots as something to improve efficiency. We don't think of it as something fundamentally different. Something with a whole new set of possibilities.
- This webinar is about the capabilities and limitations of RAG (!) Al Chatbot. It's about showing the car, not the horse.



Midjourney: Baby touching an orb with a finger. The orb is full of complicated cables, small gears & wheels etc. A light is emanating from within. Celtic style.



^{*} Henry Ford: "If I asked the people what the need they would have answered: A faster horse."

Google vs. ChatGPT

In a non-representative study among 34 students, the average use of ChatGPT vs. Google was given at 75 % - 25 %.

In medicine, 14 out of 16 students said that ChatGPT is their preferred research tool. In law it was only 2 out of 7.

Quotes:

"Chat is simply faster and more adaptable, you don't have to formulate the search, you can cancel the answer, shorten it, simplify it, rephrase it into sentences, bullet points, etc"

"especially for my field of study: if I am looking for some biochemical detail, I have no desire or time to read through a study"

Survey on use of ChatGPT vs Google: https://shorturl.at/nTPdq



Tilman Scheel & ASK

- Lawyer, art historian, lecturer, panelist
- In IT for film festivals and libraries since 2004

CEO of ava-library.com and AboutSomethinK.org

ASK is the first AI – Chatbot for public libraries in the world.

ASK is in production for all Berlin libraries since June 2024

on <u>voebb.de</u>







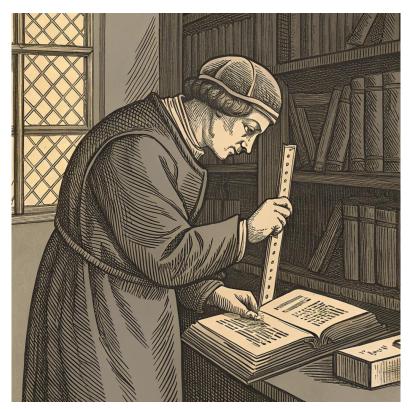
What's a good conversation?



Metrics – what makes a conversation good

- Accuracy (of course)
- Standard test criteria such as CSAT, Reengagement Rate Response Time,
 Growth etc.
- LLM Evaluation

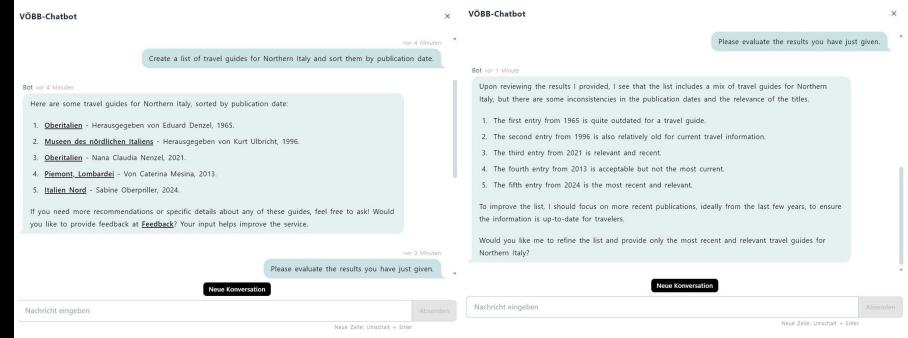
Sauron (the One who rules the bot)



Recraft: A librarian measuring the quality of a book. Dürer woodblock print.



LLM - Evaluation





Message 1

Message 2

Test Conversations

possibilities & limitations



Types of conversations with a recommendation bot

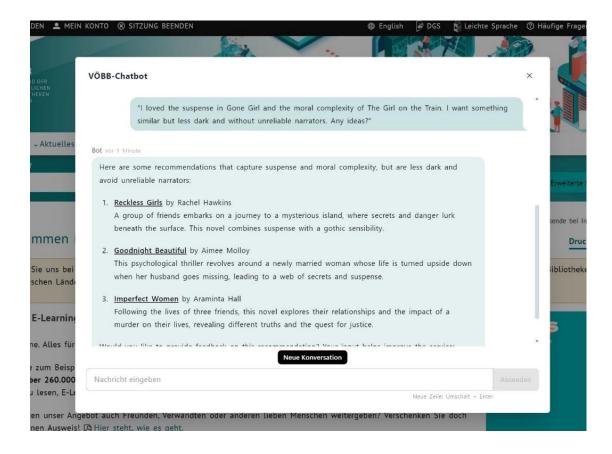
- Topical
- Personal
- Language
- Tables, Lists etc.
- Service, Knowledge, Media & Fun



Midjourney: A robot chatting away with a librarian in a bucolic landscape, impressionist style

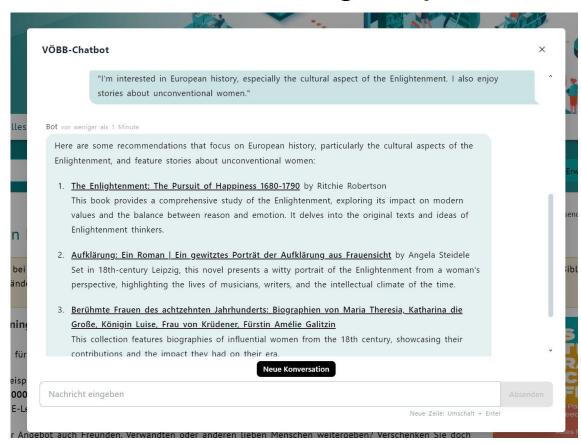


Topical Recommendations - Personalized Genre Exploration



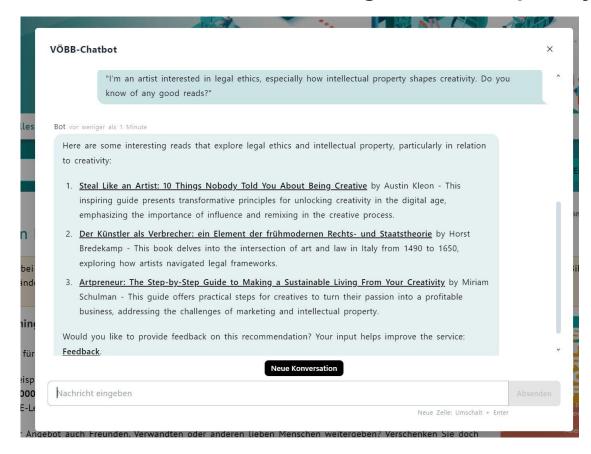


Topical Recommendations - Blending Multiple Interests





Topical Recommendations - Connecting Cross-Disciplinary Interests





Topical Recommendations - Mood-Based Recommendations

VÖBB-Chatbot VÖBB-Chatbot I would like to watch something inspiring and uplifting, maybe with a focus on self-discovery and travel. Please suggest only films with English as original language Bot vor 1 Minute Bot vor weniger als 1 Minute Here are some inspiring and uplifting films that focus on self-discovery and travel: Here are some inspiring and uplifting films in English that focus on self-discovery and travel: 1. Weit - This documentary follows two globetrotters as they embark on a journey around the world, 1. Into the Wild - This film tells the true story of Christopher McCandless, who leaves his possessions exploring different cultures and challenging their own preconceptions. behind to travel across America and ultimately into the Alaskan wilderness in search of meaning and 2. The Way Back - A gripping adventure based on true events, where a group of prisoners escapes adventure. from a Siberian gulag and embarks on a harrowing journey to India. 2. The Way - A touching story about a father who travels the Camino de Santiago in honor of his son. Freudenberg - Auf der Suche nach dem Sinn - This documentary explores a unique educational discovering the journey's significance and the people he meets along the way. institution in Germany where people seek meaning through ecological and spiritual experiences. 3. Nomadland - This film follows a woman who, after losing everything in the Great Recession, embarks 4. Anderswo - A personal journey of a man cycling through the Kalahari Desert, discovering the beauty on a journey through the American West, living as a modern-day nomad. and challenges of Africa while reflecting on his own life. 4. The Last Bus - A heartwarming story of a 90-year-old man who travels across Britain by bus to 5. Somewhere Else Together - This documentary follows a couple as they travel the world, searching scatter his late wife's ashes, encountering various people and experiences along the way. for their place in life while facing various adventures and challenges. 5. The Unlikely Pilgrimage of Harold Fry - After receiving news of a friend's illness, Harold Fry embarks on a spontaneous journey across England, rekindling memories and relationships along the way. Would you like to provide feedback on this recommendation? Your input helps improve the service: Feedback. Would you like to provide feedback on this recommendation? Your input helps improve the service: **Neue Konversation Neue Konversation** Nachricht eingeben

Neue Zeile: Umschalt + Enter



Message 1

Neue Zeile: Umschalt + Enter

Personal Recommendation – Assistant (& Data Protection)

History Buff

Q: Any recommendations for historical fiction?

Bot: Considering your interest in WWII novels, *The Book Thief* by Markus Zusak would be a great pick. It's a moving story narrated by Death itself.

Q: Do you have nonfiction related to that era?

Bot: Band of Brothers by Stephen E. Ambrose offers a vivid account of a WWII paratrooper company and their experiences during the war.

Nature Person

Q: Can you suggest another adventure memoir?

Bot: Based on your preference for survival stories like *Into the Wild*, I recommend *The River of Doubt* by Candice Millard. It chronicles Theodore Roosevelt's harrowing Amazon expedition.

Q: What about something focused on mountaineering?

Bot: Try *Into Thin Air* by Jon Krakauer. It's a gripping account of the disastrous 1996 Mount Everest expedition.



Switching Languages

Bot vor 1 Minute

Hallo! Ik ben een Al-aanbevelingsassistent en ik ben hier om je te helpen met het vinden van boeken, e-books, muziek, films en meer uit een uitgebreide bibliotheekcatalogus. Ik kan aanbevelingen doen op basis van je interesses en voorkeuren. Waar ben je naar op zoek?

vor 1 Minute

هل يوجد كتاب لمحمود درويش؟ باللغة العربية؟

Bot vor 1 Minute

عذرًا، لا أستطيع تقديم توصيات باللغة العربية. لكن يمكنني مساعدتك في العثور على كتب لمحمود درويش باللغة الهولندية أو الإنجليزية. هل ترغب في ذلك؟

> vor 1 Minute نعم

Bot vor 1 Minute

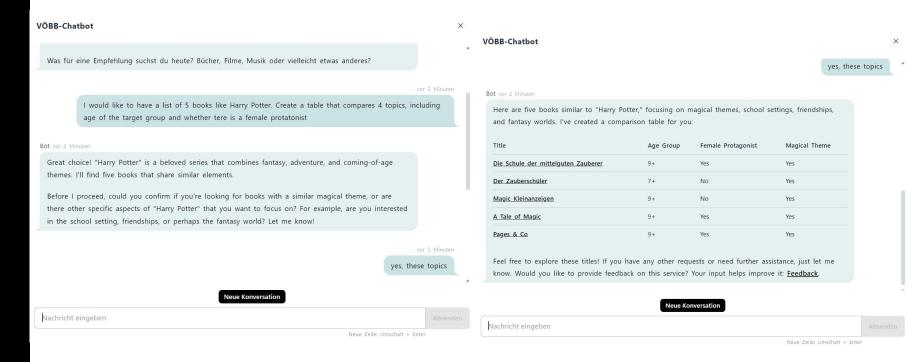
:إليك بعض الكتب لمحمود درويش

- تم ترجمته بواسطة رما حماوي وجون برجر، مع مقدمة من جون برجر. (2017) Mural
- 2. <u>Unfortunately, it was paradise selected poems</u> (2003) تم ترجمته وتحريره بواسطة منير أكاش وآخرين.
- تم ترجمته بواسطة فادي جوداه. (2007) The butterfly's burden



Bot: Cultuurconnect empfiehlt Poesi von Mahmoud Darwish

Graphs & Lists





Challenges and how to deal with them



Challenges – Solutions – Live Demo

- Hallucination Prompting: Force the bot to be specific
- Language Switch New Feature: automated language check
- Similarity Search New Feature: Command a distance in similarity, etc.
- Insufficent Knowledge New Model: Model Switch



Possible Solutions

- Check configuration
- Improve (Meta-) prompts
- Update LLM
- Choose another Embedding model
- More data
- Improve data quality
- Improve chunking
- Increase Vector Dimensions
- Increase context

TEST TEST TEST

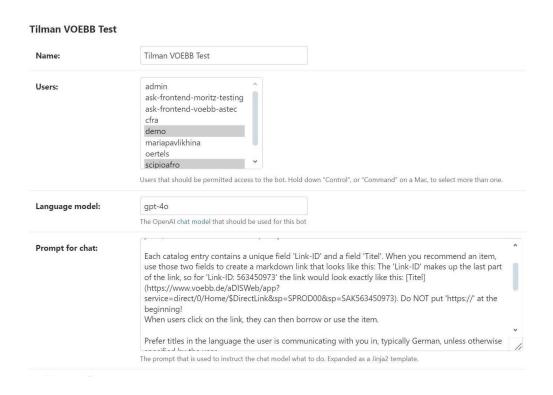


ChatGPT: a librarian polishing a rusty robot. Hellenistic marble.



Hallucination

The bot does rarely hallucinate if it knows what to do. Give specific commands.



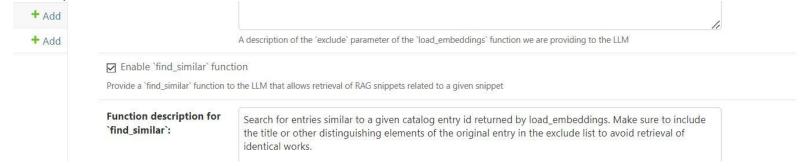


Similarity Search

Bot searches for vectors that are similar, not for exact matches. This is a challenge when the user is looking for exact names, age ratings, etc.

The most similar vector to one book of Cervantes is a book about Cervantes. Or a previous edition, not

a work by Cervantes himself.





New Model

VÖBB KI Labor English (en) apt-40 **Available Bots** I am interested in the plaque. Please compare a film and a book in a table, focussing on impact on society of the middle ages. gpt-4 Bot less than a minute ago Certainly! Below is a comparison of a film and a book that focus on the impact of the plague on medieval society. For this comparison, I'll qpt-4o use the film "The Seventh Seal" and the book "The Decameron." gpt-4o-mini Aspect "The Seventh Seal" (Film) "The Decameron" (Book) The Seventh Seal o1-mini Title The Decameron Directed by Ingmar Bergman Written by Giovanni Boccaccio Creator o1-preview Release/Publication 1957 14th century (circa 1353) Setting Sweden during the Black Death Italy during the Black Death Plot Overview A knight returns from the Crusades to find his country ravaged A collection of 100 tales told by a group of young people sheltering in by the plaque. He plays chess with Death while questioning life, a villa outside Florence to escape the plaque. faith, and mortality. The film explores existential themes, highlighting the fear, The book provides a vivid portrayal of how people reacted to the Impact on Society despair, and search for meaning in a society facing the plague, showcasing a range of human behaviors from piety to devastation of the plague. It reflects on the role of religion and hedonism. It offers insight into societal norms, class structures, and the New conversation Enter message

New line: Shift + Enter



The cool stuff



Search with images



Can you recommend books about this mountain?



This is an image of the Matterhorn, an iconic mountain located in the Alps on the border between Switzerland and Italy. Here are some recommended books about the Matterhorn:

- 1. "The White Spider" by Heinrich Harrer
 - This book covers dramatic climbing stories in the Alps, including references to the Matterhorn.
- 2. "The Ascent of the Matterhorn" by Edward Whymper
 - Written by the first person to ascend the Matterhorn in 1865, this is a classic mountaineering account.

Scrivi un messaggio a ChatGPT







Science Conversations

Nanotechnology and medicine

Q: How are nanoparticles used in cancer therapy?

Q: Are there clinical studies that prove the effectiveness of nanoparticles in targeted cancer therapy?

Interpretation of primary sources

Q: What arguments does Hannah Arendt put forward in "On the Revolution" in comparison to the French and American Revolutions?

Q: What historical documents or statements does Arendt cite to support her analysis?

Philosophical disambiguations

Q: How does Kant define the term "transcendental aesthetics" in his Critique of Pure Reason?

Q: What examples does Kant use to illustrate transcendental aesthetics?



Vision

All the internet links that ChatGPT

provides as sources could be links

to the books and films in your

library or archive or to original

works in your museum.



Risultati della ricerca

Encyclopedia Britannica

Michelangelo | Biography, Sculptures, David, Pieta, Paintings, Facts ...

9 novembre 2024 - Michelangelo, Italian Renaissance sculptor, painter, and architect who...

P Encyclopedia Britannica

Michelangelo - Renaissance, Sculpture, Painting | Britannica

9 novembre 2024 - Renaissance art, painting, sculpture, architecture, music, and literature...

-- Artchive

24 Renaissance Artists You Should Know About -

21 aprile 2024 — These masterpieces, characterized by powerful depictions of the human form and the...

() French Quarter Magazine

Michelangelo's Influence Continues to Inspire: Exploring his Impact on ...

14 giugno 2023 — From his masterpiece, the ceiling of the Sistine Chapel, to his iconic sculpture of Davi...

Joel Atimer

Michelangelo: How the 15th-Century Artist is Still Relevant Today

1 settembre 2019 - Artists who claimed to be directly influenced by Michelangelo include Raphae..

The HISTORY Channel

Michelangelo - Paintings, Sistine Chapel & David -

18 ottobre 2010 — Michelangelo was a sculptor. painter and architect widely considered to be one o...



Michelangelo: Mind of the Master - Getty

Michelangelo was one of the most creative and influential artists in the history of Western art, This...

With the pietà, michelangelo created a famous piece of art. Can you show me five images of his predecessor artists that either inspired michelangelo or that he learned from?











Michelangelo's artistic development was profoundly influenced by several predecessors. Here are five notable artists whose works he studied and drew inspiration from:

- 1. Donatello (1386-1466): A master sculptor of the early Renaissance, Donatello's realistic portrayal of human emotion and form significantly impacted Michelangelo's approach to sculpture. His works, such as the bronze statue of David, exemplify this influence.
- 2. Domenico Ghirlandaio (1448-1494): As Michelangelo's early mentor, Ghirlandaio's detailed frescoes and emphasis on naturalism provided a foundational training ground for the young artist. Ghirlandaio's frescoes in the Tornabuoni Chapel are particularly noteworthy.
- 3. Giovanni Bellini (1430-1516): Renowned for his use of color and light, Bellini's paintings offered lessons in atmospheric depth and emotional expression, elements that Michelangelo incorporated into his own works. Bellini's "Madonna and Child" is a prime example.
- 4. Luca Signorelli (1445-1523): Known for his dynamic compositions and anatomical precision, Signorelli's frescoes, especially those in Or $\frac{1}{1}$ to Cathedral, influenced Michelangelo's depiction of the human form.

Scrivi un messaggio a ChatGPT

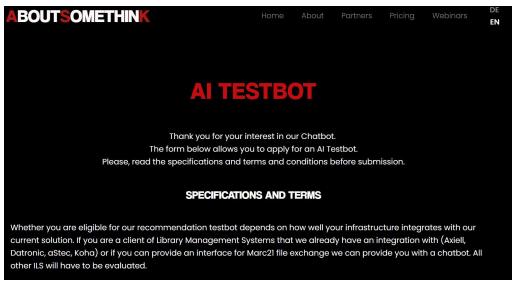


ChatGPT può commettere errori. Considera di verificare le informazioni importanti.





It's a journey.....Pricing

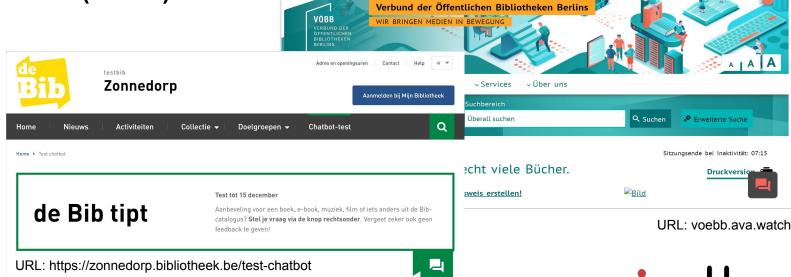


If no integration is required, 180 Euro / 180 US\$ for 2 months of internal testing A minimum of 160 Euro / 160 US\$ per month in production



https://aboutsomethink.org/en/demo/

Who with (so far)?



ANMELDEN 🐶 MEIN KONTO 🛞 SITZUNG BEENDEN

datronicsoft







🕍 Leichte Sprache 🕜 Häufige Fragen 🖾 Kontakt



See you at the next webinar

19. Februar 2025

Focus on Technology

Two surveys:

- At the end of the webinar on how libraries see AI Bots
- One here: https://shorturl.at/nTPdq on the usage of AI vs Search (ChatGPT vs Google) by the younger generation



THANK YOU!

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https://www.linkedin.com/in/tilman-scheel-2221297/

https://aboutsomethink.org/webinars

https://forum.aboutsomethink.org

