



Incorporating Artificial Intelligence Into Your German Genealogical Toolkit

*Artificial Intelligence isn't replacing traditional genealogy research
but it is making it more efficient!*

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Some Genealogical Applications of Artificial Intelligence

- Transcribe and Summarize Documents: Use handwriting analysis and/or Optical Character Recognition to convert the image of a document into text.
- Translate Documents: If your ancestors' records or journals are in a different language than you speak, AI translation can help you get a first glimpse at the information they hold.
- Analyze and Summarize Documents:
- Analyze, Restore and Enhance Images: Identifying faces in old photos, organize, colorize, repair, and label photos.
- Construct and Compare Family Trees: AI can suggest relatives to add to a family tree, or compare the trees you have created on various Web sites, noting similarities and differences.

Terminology

- **Artificial Intelligence (AI)**, the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings.
- **A Large Language Model (LLM)** is a type of machine learning model designed for natural language processing tasks such as language generation. LLMs are language models with many parameters, and are trained with self-supervised learning on a vast amount of text.
 - *"LLMs generally, emphasis on generally, don't care if the output that they create and provide is factually correct right, only that it is the most probable output based on the input."*
Blaine Bettinger, The Genetic Genealogist
- **Generative Pre-trained Transformers (GPTs)** are a family of neural network models that use patterns observed in large databases of images, text, and other information to create human-like text and content (images, music, and more), and answer questions in a conversational manner.
- **Research Agent** an algorithm that has: a) strong LLM (for language and information processing); b) Internet access (for research and information gathering); and c) reasoning and agentic abilities (to plan, evaluate, and iterate); and produces multi-page, source-linked reports.

You Are Likely Already Using Artificial Intelligence in Your Research

FamilySearch.org

Full Text Search

- Uses handwriting recognition and Optical Character Recognition (OCR) software to convert an image of text into a machine-readable format allowing users to search the full text of records before they are even indexed. Currently 3,437 collections, including 21 specifically for Texas.

Record Indexing

- Was using an automated obituary indexing system in 2015.
- Initial indexing of records from historical documents will now be done by FamilySearch's artificial intelligence rather than by online volunteers.

AI Research Assistant

- Searches your tree to find people to add.
- Finds sources about a person in your tree from the web.
- Provides answers to genealogical questions.
- Suggests additional resources where you might find more information.

Ancestry.com

Hint Service

DNA ThruLines™, Ethnicity, Traits, Origins, Genetic Communities™, Networks, LifeStory, Story Builder Potential Mother and Father Hints

- A potential mother or father on your family tree is a hint or collection of hints that point to a certain person. Typically the algorithm has found a family tree with supporting facts and family members that suggest the individual may be related to the individual in your tree. These hints are only as accurate as the information in the other member's tree.

Document Transcription (Beta)

- Transcribe handwritten journals, diaries, and letters that you have uploaded to your family tree.

MyHeritage.com

Photo Enhancement

- A variety of tools to colorize, sharpen, "animate," even help determine the date of an image based on characteristics such as fashion styles, hair styles, and more.

Instant Discoveries

- Algorithms suggest entire branches of family trees based on existing data, offering users a chance to rapidly expand their tree by adding connected relatives from MyHeritage's database.

Cousin Finder™

- Cousin Finder™ analyzes your Smart Matches™ to identify all cases where your direct ancestors appear in a matching family tree, and are also blood relatives of MyHeritage members associated with that tree.

AI Biographer™

- Uses details from matching historical records and family tree profiles to automatically compile a Wikipedia-style biography article about a person's life.

Live Memory™ (\$)

- Live Memory™ animates photos and simulates the scenes depicted in them in a highly realistic way. In photos with multiple people, the algorithm will animate the gestures and make them interact based on what it thinks will be most realistic. The result is a 5-second video clip.

Some Popular Artificial Intelligence Platforms

Most platforms offer both free and paid versions. The free versions are usually all you need for most genealogical research application.

- ChatGPT (<https://chat.openai.com>)
- Claude(<https://claude.ai>)
- Transkribus (<https://www.transkribus.org/>)
- Perplexity (<https://perplexity.ai>)
- Microsoft Copilot (Edge browser) and integrated into Windows 10/11 (<https://copilot.microsoft.com>)
- Google Gemini (Chrome browser) (<https://gemini.google.com>)
- Google Translate (<https://translate.goggle.com>)

It's All About The Prompt

- It's called a chat, so give it directions, ask it questions.
- Provide relevant background information.
- Deriving a prompt that yields the best result is an iterative process. Iterate as needed until you get the desired result.
- If, after several iterations, you can't get the output that you want. consider asking another tool!

Writing a Good Prompt

- Specify a **Role**: genealogist, historian, journalist, etc.
- Provide a **Task**: summarize, transcribe, extract, translate, organize, etc.
- Indicate a **Format**: table, list, graph, picture, poem, spreadsheet, etc.
- Add any **Limitations**: "Use only the information provided." "Indicate any words you don't understand."

Sample Prompts: Some Genealogical Applications of Artificial Intelligence

- "The attached image is a funeral card for a Barbara Meisner from 1896. It is written in German and printed in the FRAKTUR font. Acting as an historian, please transcribe the text of the card."
- "Act as a genealogist. Using the provided obituary extract the people and their relationships to the decedent into a table, with a unique person in each row. Use only the information provided in the obituary. Make a note in a row if you cannot determine the relationship to the decedent."
- "Act as a genealogist. The two images are the first and second parts of the will of Bridget McClory. Please generate an abstract of the will. Use only the information in the will."
- "These are profiles from FamilySearch, Ancestry and MyHeritage of Andreas Meisner. Please compare and contrast. Output the information in the form of a table. Let me know if any information is missing or conflicting and advise the next steps."
 - Followed by: "Yes, please recommend online resources to continue my research."
- "Where can I find maps produced by the G M Hopkins Company online?"
 - Followed by: "What Hopkins maps are available for North Carolina?"

An Example Chat Session

Me: “The attached file is a German death register of Friedrich Heinrich Diener, dated 8 Jan 1946 from the town of Ellrich. Parts of the page are printed in Fraktur and other parts are handwritten. In the role of an expert genealogist transcribe the document and translate into English, maintaining the exact verbiage of the document.”

ChatGPT suggests: “Would you also like me to format this nicely into a printable document or provide a side-by-side German-English version?”

ChatGPT also suggests: “Would you also like a **typed version mimicking** the original layout (with the handwritten parts underlined or italicized)? I can format that if you want! 📄👉
Would look nice if you're planning to archive it.”

Me: “Yes, please.”

ChatGPT: “Perfect — I'll now create a typed version that mimics the original layout, just like the death register page. I'll represent the handwritten parts in italics to distinguish them from the printed text. Here's the formatted version for you:”

ChatGPT suggests: “Would you also like: A clean printable PDF of this layout?

A version with Fraktur-style font to match the original script even more closely?

Let me know! It would look very authentic if you're building a family history file or memorial. 📄👉

Me: “Yes, and also do the same for the English Translation.”

ChatGPT: “Excellent! I'll first prepare both parts properly laid out for you:

German version (already shown, but I'll finalize it cleanly for PDF form).

Matching English version — same style, handwritten parts in italics.

After that, I'll bundle them together and create a printable PDF for you.”

ChatGPT: “Next step: I'll now generate a clean PDF file with both the German and English side-by-side or page-by-page (you can choose the style). Would you like:

German and English side-by-side (parallel)?

Or German first, then English following on the next page?

Which format would you prefer? 📄👉 (Answer with just "side-by-side" or "one after the other.")”

Me: “side-by-side”

ChatGPT: “All done! You can download your side-by-side German and English PDF here:

👉 Download the PDF

Let me know if you'd also like a second version with slightly fancier typography (like Fraktur style for the German side)! 📄👉

Me: “Yes, use the Fraktur style for the German side, with italics for the handwritten parts.”

ChatGPT: “Here's your updated version with the Fraktur-style (emulated) font for the German side and italics for the handwritten parts:

👉 Download the Fraktur Style PDF

If you want, I can also create a true historical Fraktur using an actual Gothic font (like "Fette Fraktur" or "UnifrakturCook") — just say the word! 📄👉

End of Chat

Final Result of The Chat Session

Death Register - Friedrich Heinrich Diener

German (Fraktur Style) | English (Standard)

Nr. 3

Ellrich, den 9. Januar 1946.

Der Maler Friedrich Heinrich Diener

wohnhaft in Ellrich, Nordhäuserstraße 65,

ist am 8. Januar 1946 um 21 Uhr 15 Minuten

in Ellrich, Nordhäuserstraße 65

verstorben.

Der Verstorbene war geboren am 18. Oktober 1884

in Ellrich, Oberamtshaus.

(Standesamt) Ellrich, Oberamtshaus Nr. 55/1884.

Vater: Hinrich Diener, Kleinhändler, evangelisch,

lebte, wohnhaft gewesen in Ellrich.

Mutter: Auguste Diener, geborene Kindling,

evangelisch, verstorben in Ellrich.

Der Verstorbene war verheiratet mit Anna Karoline

Christianine Marie, geborene Braun, Ellrich,

Nordhäuserstraße 65.

Eingetragen auf mündliche Anzeige der Ehefrau.

Der Anzeigende ist dem Standesbeamten bekannt

durch persönlichen Verkehr.

Vorgelesen, genehmigt und unterschrieben

(Anna Diener)

Der Standesbeamte

In Vertretung: (Wary /w/)

Todesursache: Herzschwäche, Lungenentzündung.

Eheschließung des Verstorbenen am 24.11.1906 in Ellrich

(Standesamt) Ellrich Nr. 37/1906.

No. 3

Ellrich, on 9 January 1946.

The painter Friedrich Heinrich Diener

residing in Ellrich, Nordhäuserstraße 65,

died on 8 January 1946 at 9:15 PM

in Ellrich, Nordhäuserstraße 65.

The deceased was born on 18 October 1884

in Ellrich, Oberamtshaus.

(Registry Office) Ellrich, Oberamtshaus No. 55/1884.

Father: Hinrich Diener, small trader, Protestant,

lived, last residing in Ellrich.

Mother: Auguste Diener, née Kindling,

Protestant, deceased in Ellrich.

The deceased was married to Anna Karoline

Christianine Marie, née Braun, Ellrich,

Nordhäuserstraße 65.

Entered based on oral notification by the wife.

The informant is known to the registrar

through personal acquaintance.

Read aloud, approved and signed

(Anna Diener)

The Registrar

In representation: (Wary /w/)

Cause of death: heart weakness, pneumonia.

Marriage of the deceased on 24 November 1906 in

Ellrich

(Registry Office) Ellrich No. 37/1906.

References

- Beaumont, John, 2025. This Simple Trick Makes Comparing Family Trees SUPER Easy.
<https://www.youtube.com/watch?v=ntxcC4L8RTQ>
- Beaumont, John, 2025. 10 AI Uses Every Genealogist Should Know.
<https://www.youtube.com/watch?v=GKqqo06l8u4>
- Bettinger, Blaine, 2025. 10 Generative AI Prompts Every Genealogist Needs to Know.
Blaine's presentation starts at 55:45
<https://muse.ai/v/mFDQAqi-20250104-Dr-Blaine-Bettinger-10-Generative-AI-Prompts-Every-Genealogist-Needs-to-Know>
- Cooke, Lisa Louis, 2025. Artificial Intelligence for Genealogy Research, and Family History Writing.
<https://www.youtube.com/watch?v=nHNLQDIK5nl>
- FamilySearch, 2025. Upcoming Changes to FamilySearch Indexing.
<https://www.familysearch.org/en/blog/upcoming-changes-to-familysearch-indexing>
- FamilySearch, 2025. Full Text Search. <https://www.familysearch.org/en/labs/>
<https://www.familysearch.org/en/help/helpcenter/unlock-the-power-of-full-text-searching-for-historical-records>
- Gánem, Andrés, 2025. How To Use ChatGPT for Translations: Updated Guide 2025.
<https://www.websiteplanet.com/blog/how-to-use-chatgpt-for-translation/>
- Henriks, Diane, 2025. Ancestry's New Image Transcript Tool: AI-Powered Handwriting Transcription.
<https://www.knowwhowearsthegenesinyourfamily.com/blog/ancestrys-new-image-transcript-tool-ai-powered-handwriting-transcription>
- Jensen, Tanya, 2024. Genealogy Document Transcription: The Magic of Digital Decoders Revealed.
<https://www.beyondgenerationsgenealogy.com/post/genealogy-document-transcription-the-magic-of-digital-decoders-revealed>
- Lisson, Lisa, 2025. Write Powerful AI Prompts to Unlock Your Family History.
<https://cms-z-assets.familysearch.org/be/28/96be2355fc6fc5a4cf4fe3608303/syllabus-for-write-powerful-ai-prompts-lisson.pdf>
- Lisson, Lisa, 2025. The 4-Part AI Prompt Approach Every Family Historian Needs to Know.
<https://lialisson.com/ai-prompts-for-genealogy-framework/>
- McCulloch, Carole, Geneablogger, 2025. 10 Steps to Building AI Skills in Genealogy: Step 1 Understanding AI in Genealogy. (8:16 minutes)
<https://www.youtube.com/watch?v=mygMlbBcyls>
- RootsTech. There are many recorded videos, especially from 2024 and 2025, that discuss Genealogical Applications of Artificial Intelligence. Login with your free FamilySearch account. <https://www.familysearch.org/en/rootstech/search?f.language=en-US&f.text=Artificial%20Intelligence&p.index=0>