Katarina Horvat[1]

ARTIFICIAL INTELLIGENCE AND USER REQUESTS. VERIFICATION OF INFORMATION PROVIDED BY ARTIFICIAL INTELLIGENCE FOR A SPECIFIC CATEGORY OF INQUIRIES FROM USERS OF THE STATE ARCHIVES IN ZAGREB

Abstract

Purpose: *To gain insight into the types of answers an artificial intelligence service provides to specific questions from archive users, and to verify and evaluate them with regard to existing advantages and disadvantages.*

Method / Approach: *The research is based on an analysis of responses generated by artificial intelligence in response to inquiries regarding specialized research topics.*

Conclusions: *Artificial intelligence can be a valuable aid in research. It offers a wealth of ideas in a single place; however, some of its responses may be inaccurate. It is an excellent tool in the hands of someone who is an expert in a field and can take the information obtained with a degree of caution and eliminate or investigate any errors in it.*

Keywords: *artificial intelligence, research on individual persons, population records, State Archives in Zagreb*

UMETNA INTELIGENCA IN UPORABNIŠKE POIZVEDBE: PREVERJANJE INFORMACIJ, KI JIH UMETNA INTELIGENCA POSREDUJE PRI DOLOČENI KATEGORIJI POIZVEDB UPORABNIKOV DRŽAVNEGA ARHIVA V ZAGREBU

Izvleček

Namen: *Pridobiti vpogled v vrste odgovorov, ki jih storitev umetne inteligence ponuja na konkretna vprašanja uporabnikov arhiva, ter te odgovore preveriti in ovrednotiti z vidika obstoječih prednosti in pomanjkljivosti.*

[1] dr. sc. Katarina Horvat, archival advisor at the State Archives in Zagreb, member of the IIAS (futurum membrum), e-mail: katarina.horvat@daz.hr.

Metoda/pristop: *Raziskava temelji na analizi odgovorov, ki jih je umetna inteligenca generirala na poizvedbe v zvezi s specializiranimi raziskovalnimi temami.*

Sklepi: *Umetna inteligenca je lahko dragocen pripomoček pri raziskovanju. Na enem mestu ponuja veliko število idej in informacij, vendar so lahko nekateri njeni odgovori netočni. Predstavlja odlično orodje v rokah strokovnjaka, ki dobro pozna raziskovano področje, zna pridobljene informacije obravnavati z ustrezno mero previdnosti ter prepoznati, izločiti ali dodatno preveriti morebitne napake.*

Ključne besede: *umetna inteligenca, raziskovanje posameznih oseb, evidence prebivalstva, Hrvaški državni arhiv v Zagrebu*

INTELLIGENZA ARTIFICIALE E RICHIESTE DEGLI UTENTI: VERIFICA DELLE INFORMAZIONI FORNITE DALL'INTELLIGENZA ARTIFICIALE PER UNA SPECIFICA CATEGORIA DI RICHIESTE DEGLI UTENTI DELL'ARCHIVIO DI STATO DI ZAGABRIA

Abstract

Scopo: *Ottenere una panoramica delle tipologie di risposte fornite da un servizio di intelligenza artificiale a specifiche domande degli utenti dell'archivio, nonché verificare e valutarne l'affidabilità alla luce dei relativi vantaggi e limiti.*

Metodo/Approccio: *La ricerca si basa sull'analisi delle risposte generate dall'intelligenza artificiale in relazione a richieste riguardanti specifici temi di ricerca specialistica.*

Conclusioni: *L'intelligenza artificiale può rappresentare un valido strumento di supporto alla ricerca. Consente di raccogliere in un unico luogo numerose idee e informazioni; tuttavia, alcune delle risposte fornite possono risultare inesatte. Si tratta di uno strumento particolarmente efficace nelle mani di uno specialista che conosce approfonditamente il settore di ricerca, sa valutare con la dovuta cautela le informazioni ottenute e individuare, escludere o sottoporre a ulteriori verifiche eventuali errori.*

Parole chiave: *intelligenza artificiale, ricerca su singole persone, registri della popolazione, Archivio di Stato di Zagabria*

INTRODUCTION

While handling user requests at the State Archives in Zagreb (hereinafter SAZG), I noticed a pattern of recurring requests-phrased in identical or similar ways-that seek searches of various records concerning Zagreb's inhabitants which do not exist within the Archives' holdings. These requests typically arise during research into a specific individual-often an ancestor of the person submitting the inquiry.

Not only are these non-existent records frequently requested, but the requests confidently ask-with a polite "please"-for searches across various listed records, as if this were the most ordinary task that Archive staff automatically perform for their users. Some clients would state in their correspondence that they wished to be informed of the resulting costs, while others would not even mention it.

(Access to SAZG archival materials is free of charge. Simple user requests are handled by preparing the materials in the reading room or by digitizing and sending the requested items. Archive staff conduct research on behalf of users only after an agreement is reached to submit a formal research request; a fee of €19.91 is charged for every half-hour-or fraction thereof-of research performed by an archival staff member.)[2]

It was discovered that such requests were written using artificial intelligence, which not only suggests material that can be considered for research at SAZG, but also creates a letter that the client can send to the Archive.

SEEKING ANSWERS FROM ARTIFICIAL INTELLIGENCE

I conducted research into the information provided by artificial intelligence regarding inquiries about individuals who lived in Zagreb in the past. In September 2026, queries were submitted to Google's widely used free service-the AI assistant Gemini, a generative platform based on written language processing. (Questions were entered without logging in, a feature automatically available via the Google search engine.)

A general inquiry addressed to this assistant (service)-"How can I research my family's origins?"-yielded very useful answers.[3] It suggested starting at home by

[2] As an exception, due to the relocation of the SAZG reading room, the first hour of research conducted by Archive staff on behalf of clients was free of charge from April 1, 2026, to November 1, 2026.

[3] This and the following questions were asked to the Gemini service on September 25, 2026.

talking to family members and examining the family archive, followed by a review of digitized sources available online. Only then did it point to state and church archives. It also mentioned the option of genetic (DNA) genealogy.

I asked where one could find records concerning individuals from mid-19th-century Zagreb. The response correctly points to registers of births, marriages and deaths and the 1857 Zagreb census (rightly noting that it is held at SAZG), and lists numerous other records containing information on inhabitants: registers of citizens, tax records, land registers, cadastral records, the archives of Zagreb guilds, historical address books and printed publications. It correctly states that the research should physically begin at the SAZG.

When I inquired about a person from Šestine (at the time a village near Zagreb, now part of Zagreb), the response correctly pointed to the registers of parish St. Mirko in Šestine. It also correctly refers to the records of the Kulmer estate in Šestine. In this response, there is also an incorrect reference to the 1857 census of Šestine, which is stated to be held in the Croatian State Archives (hereinafter HDA)-specifically within the Ban's Government ("Banska vlada") fonds-in the form of census sheets (household census forms). It further correctly directs one to civil registers and records of the state of souls ("status animarum"). Since I knew that the 1857 census sheets for Šestine had not been preserved, I specifically asked whether census records for Šestine existed within the Ban's Government archives. Then I got the answer that they didn't exist. Thus, the service provides contradictory information. The exact answer can be reached following a follow-up question. As an alternative to the non-existence of the census, it refers to the status animarum and the urbarial books and the books of the serfs of the Kulmer estate.

I received the following answers to the question: "Which records should be examined to research a family that lived in Zagreb around 1900?" It lists the most valuable source-parish registers of births, marriages and deaths-first. When enumerating the oldest Zagreb parishes, it lists three of the four existing ones but fails to mention the fourth at all; instead, it mistakenly includes a more recent parish established only in 1915 (citing the Parish of St. Blaise in error instead of the Parish of St. Peter).

The AI service then cites a specific record held at the SAZG, describing it as a gold mine for researchers. It provides a very detailed description of this record. Everything would be fine if this record actually existed.

Residence Registration and the Tenant Registry (A Goldmine for Researchers)

If your ancestors lived in Zagreb as lodgers, workers, or citizens who moved frequently, the city police (Police Directorate) tracked their every move.

- ***Residence registration forms (Meldezettel):*** *Every citizen was required to fill out a registration card upon moving into an apartment in Zagreb. These cards contain: full name, exact date and place of birth (especially important if the person had moved from the interior), occupation, spouse's name, names of children, and all addresses where they had lived in Zagreb.*
- ***Where to look:*** *This incredibly valuable card file is housed at the State Archives in Zagreb (SAZG) within the "Royal Police Directorate in Zagreb" fonds. The materials are partially indexed, and archivists can assist you in locating a surname.*

The service also correctly refers to other sources valuable for such research: historical address books and telephone directories of the city of Zagreb, registers of domiciliary right ("imenike zavičajnika") and the historical press (old Croatian newspapers).

When asked to elaborate on the non-existent card index-*a gold mine for researchers*-the service describes it in minute detail. It contextualizes the index's historical origins, lists all the data it contains, and even describes its physical appearance and location. The client is expected only to know the full name of the person they are looking for and the approximate period during which that person lived in Zagreb. Once the client submits a request in person at the SAZG reading room, an archivist will locate the requested file in the repository and bring it to the reading room table for inspection. Everything is explained in great detail and sounds very convincing. That card will contain various details about the person (or persons) who is being researched: *personal information (first name, surname, exact date of birth, and religious affiliation); origin (place of legal domicile („mjesto zavičajnosti")), the exact location from which the person moved to Zagreb; occupation; marital status; and a chronology of moves (listing every address where the person lived in Zagreb, as well as the dates of relocation between streets).* I truly wish we had a card catalog like this in the Archive! Even the physical appearance of the collection itself is described: *The collection is organized in the form of massive wooden cabinets with millions of index cards, arranged in strict*

alphabetical order by surname and first name. It is also specified how it will be searched for and delivered to the client's table: *You will fill out an order form in the reading room. Since these files are sensitive and arranged in special archive containers, archivists will search for them in the storage room for you and bring you the exact box or board with files of that surname to a table in the reading room, where you are allowed to browse and photograph them.*

Given that the client assumes that this is an existing file (when it is already described in such detail), it is not surprising how easily some clients request a check of their ancestor's records based solely on a full name, an approximate timeframe, and-possibly-an address where the person resided in Zagreb.

I assume this refers to a record described in historical texts as having once existed, or to a mix of information about such records available online. In the web sources listed after the description of these non-existent records, the official website of the State Archives in Zagreb or similar websites with information about the State Archives in Zagreb are mentioned. None of these websites state anything about the records being described.

SAZG holds various records containing some of this information, but there is no single, surname-searchable record covering this entire period that consolidates such a wealth of data on Zagreb's residents in one place. (Similar to this record is the card index of persons with domiciliary right ("pravo zavičajnosti") in Zagreb, kept in the drawers of a wooden filing cabinet; however, those cards contain data only on individuals holding such rights in the city of Zagreb and provide less information than the records listed here. These cards are linked to registers of persons with domiciliary right ("imenici zavičajnika") and possibly related documents, which may contain more information. The card index of consumer registration forms for Zagreb residents from the 1941–1945 period is also similar; each card contains some data on all members of the same household. Both card files are preserved in the Zagreb City Municipality fond. Also similar is the card index of household consumer cards (in the People's Committee of the City of Zagreb fonds) from 1945, in which the cards contain extensive personal data on Zagreb residents, with each card covering a single person.)

Following my request to specify the fonds containing this material (card index), the service (AI) once again provides a detailed list of *several related archival*

fonds held by the State Archives in Zagreb and the Croatian State Archives, *depending on the specific years and the body that maintained the records*: HR-DAZG-6 Royal Police Commission for the Free Royal Capital City of Zagreb („Kraljevsko redarstveno povjerenstvo za Slobodni kraljevski glavni grad Zagreb"), HR-DAZG-12 Zagreb City Police Administration („Uprava policije grada Zagreba"), and HR-HDA-120 Police Directorate in Zagreb („Redarstveno ravnateljstvo u Zagrebu"). In reality, these fonds are interconnected; however, the card index mentioned here is not contained in any of them. It is further claimed that the bulk of the card index itself is held at SAZG: *The largest and most frequently consulted section of the alphabetical tenant card index (registration forms) was physically consolidated and transferred to the State Archives in Zagreb (SAZG) for processing, as it pertains to population monitoring at the city level.*

When asked to cite the source mentioning this, it states: *These data and the structure of the fonds have been officially verified and described in fundamental national and local archival literature.* Then it lists the official guides produced by the State Archives in Zagreb (DAZG) and the Croatian archival profession *(Guide to the Fonds and Collections of the State Archives in Zagreb; Overview of Archival Fonds and Collections of the Republic of Croatia; Digital Guide to DAZG Fonds; and the ARHiNET system-the national information system for the description of archival material).* These guides describe the fonds mentioned here-which do contain information regarding place of residence-yet none of them mentions the card index in question.

When asked again, it stated: *Yes, it is absolutely certain that these historical files and residence registration forms are located in that particular archive. However, the exact name and designation of the fonds depend on the period being searched, as the Zagreb police frequently changed their official names over time. Information regarding which fonds contains these records is documented in official inventories, archival guides, and the ARHiNET information system.*

To the question *What record (source) states this?* responds by referring to the Online guide of the State Archives in Zagreb: *The main official record in which this is accurately listed and structured is:*

- *Digital guide through the holdings and collections of the State Archives in Zagreb - In this official register (in series and subseries within the history of the*

creators of the police bodies) preserved books and alphabetical files of tenants are exhaustively listed.

It is further noted that the registration forms are distributed across the following fonds: HR-DAZG-6 Royal Police Commission for the Free Royal Capital City of Zagreb and HR-DAZG-12 Police Administration of the City of Zagreb. Depending on the period of interest to the researcher-with the specific timeframes covered by each fond also indicated-these fonds contain the aforementioned card index i.e. *the collection of residence registration forms and the tenant index (covering citizens, workers, and subtenants*).

This guide indeed describes both of the SAZG archival fonds listed here. Regarding the HR-DAZG-6 Royal Police Commission for the Free Royal Capital City of Zagreb ("Kraljevsko redarstveno povjerenstvo za Slobodni kraljevski glavni grad Zagreb") fonds, the content description notes that the *material has been preserved only fragmentarily; consequently, the fonds consists primarily of registration aids-specifically, registry logs and indexes-along with a small number of individual case files generated by the work of the Zagreb Police Commission*. This is also evident in the listing of series: *1. Registration aids (registry logs and indexes), 1905–1918, 115 books.; 2. General case files, 1908–1918, 1 box.*

In the description of the content of the material, it is stated that it has been preserved fragmentarily and consists of registry logs, indexes and a small number of general files. However, in the valorisation of the material, data on the registration of the resident's residence and records of the movement of foreigners are mentioned, and this is exactly what creates confusion with the artificial intelligence service: *Since the records contain data on the registration of residents' places of residence and the tracking of the movements of foreigners within the City of Zagreb, the fonds can serve as a supplementary source for genealogical research. Preserved registry aids can serve as a supplementary source for various types of research because, in addition to a brief note on the subject matter of a case, the remarks section may also contain a reference to another administrative or judicial body that handled the same case.*[4]

[4] HR-DAZG-6 Kraljevsko redarstveno povjerenstvo za Slobodni kraljevski glavni grad Zagreb https://daz.hr/vodic/site/article/hr-dazg-6-kraljevsko-redarstveno-povjerenstvo-za-slobodni-kraljevski-glavni-grad-zagreb/1/4 accessed on October 6, 2026.

So, although there are no special records of registration of residence and records of foreigners, (these data are preserved only in registry aids), the AI service reformulated it in a way that says that very special records of registration of residence are preserved in these fonds.

This is also the situation with the HR-DAZG-12 Zagreb City Police Department fonds. The description of the content of the fonds states: *The largest part of the fonds consists of registry aids (*registry logs *and indexes). In addition, three more record books (issuance of traffic permits and statistical data) have been preserved. The general registered files have been preserved very fragmentarily, they do not relate to the operations of the Police Administration, but to the recording of the exchange of work books and records related to the civil service tax.*

The following are listed in the series: *1. Registry aids, 1919 - 1941, 616 books; 2. Books of issued traffic permits, 1930/1932, 2 books; 3. Requests for replacement of work books, 1939-1940, 25 boxes; 4. List of civil service tax booklets, 1928. – 1932, 1 box; 5. Statistical data, 1936 – 1941, 1 book.*

However, the description of the fonds valorisation mentions data on the resident's change of residence: *Since the fonds contains information on the registration of residence of residents and foreigners in the area of Zagreb, fonds can be an auxiliary source for genealogical research. Preserved registry aids can be an additional source for various research because, in addition to a brief notation on the content of the case, the note may also contain a reference to another administrative or judicial body where the said case was also handled.* [5]

In conclusion, although the above-mentioned card index is not held at SAZG, descriptions of the two archival fonds containing data on residence registration (which can actually be found in registry aids) enabled the artificial intelligence service to construct a specific record of residence registrations.

Another similar question was put to Google's Gemini service: "How can I research an ancestor who lived in Zagreb around 1900?"[6] At the beginning, the service lists websites with digital population records such as *Acta Croatica* and *FamilySearch*. It also lists the institutions where archival materials are kept,

[5] HR-DAZG-12 Uprava policije grada Zagreba https://daz.hr/vodic/site/article/hr-dazg-12-uprava-policije-grada-zagreba/1/4 accessed on October 6, 2026.

[6] This question and the following ones were put to the Gemini service on September 26, 2026.

namely the State Archives in Zagreb and the Croatian State Archives. It lists the types of documentation to be searched (church parish registers, old city directories of Zagreb, cemetery records). However, when listing the old Zagreb parishes that kept birth, marriage and death registers, it incorrectly lists the parish of St. Blaise instead of St. Peter. It also offers good advice for successful research.

Regarding the question of whether there are population records, it states that there are censuses from 1900 and 1910 in SAZG (!) and these are the census sheets (lists) that provide numerous data:

- *Full name of the head of the household, spouse, children, as well as any domestic staff or lodgers.*
- *Exact dates and places of birth for each member (crucial if the ancestor had moved to Zagreb from another location).*
- *Religion and mother tongue (e.g., Croatian, German, Hungarian).*
- *Occupation or trade practiced.*

Unfortunately, these census sheets have not been preserved; there are only summary statistical data in the Croatian State Archives and various accompanying and summary materials in other archives.

Furthermore, the AI service also lists residence registration books and card files (!), claiming they are held at the State Archives in Zagreb and providing a very detailed description of them!

Residence registration books and residency card files: The City of Zagreb operated a mandatory residency registration system. The collected historical family and personal registration forms are preserved within the Zagreb City Municipality fonds at the State Archives in Zagreb (SAZG). They function as historical index cards indicating when a person moved to a specific address, where they arrived from, who their family members are, and when they changed their address or moved out of the city. The problem is that they don't exist. As a source, the AI service cites SAZG's website, which does not say this.

As sources for research, it also cites *Zagreb address books and trade directories from around 1900*, saying that many of them have been digitized and can be viewed on the websites of the National and University Library or the digital collections of the Zagreb City Library. *They function like old telephone directo-*

ries (arranged alphabetically and by street) and contain the names of all heads of households, homeowners, tradespeople, civil servants, and merchants, along with their exact addresses.

He instructs to send an inquiry or personally visit the SAZG reading room, which it states is located in Florijana Andrašeca Street (this is an address that at the time of writing was no longer the current address of the SAZG reading room, however, the information had not yet been updated on the official DAZG website).

It further suggests that the address or district in Zagreb where the requested person lived be specified, and that the inquiry be sent to SAZG. After I asked again which records the data would be searched in, I once again received the answer: *the tenant registration file (prijavna kartoteka stanara) and registration books (prijavne knjige).* It also states that this is the most accurate source and mentions the house sheet (*kućni list*) describing all the data it provides! It goes on to specify those (in this way non-existent) records!

It describes what using these records in the SAZG reading room looks like. Through such precise descriptions of non-existent records, it further convince clients that such records do indeed exist. It also claims that census forms (sheets) from the 1900 and 1910 censuses for Zagreb exist, and describes how to approach their research and the data they provide, even though they have not been preserved. It then refers to church registers. In listing the oldest parishes in Zagreb, it incorrectly mentions the parish of St. Blaise, and does not mention the parish of St. Peter.

Regarding the procedure for accessing the records, it is stated that simply submitting a request to DAZG is sufficient and that DAZG staff will inform the applicant about any documents found. This implies that DAZG staff conduct research on behalf of clients as part of standard procedure, which is incorrect. (As previously noted, it is possible to submit a research request, but this incurs a separate fee and is treated as a special category of request.)

CONCLUSION – HOW ARTIFICIAL INTELLIGENCE CAN HELP US BECOME BETTER

Since we can assume that citizen inquiries involving artificial intelligence will be more and more common, we must find a way to use it to improve the work of archivists and archives. Although the focus of this text was more on mistakes,

there is a lot of good advice and benefit to be gained from artificial intelligence services. After analysing the results obtained by querying this service, the pros and cons regarding the requests listed here can be summarized.

ADVANTAGES

Artificial intelligence services in one place provide guidance for starting research by listing a large number of ideas, i.e. various research possibilities, especially those on online sources. Many sources and procedures are accurately and precisely listed, with references to the relevant websites where this information is officially published.

Archives can improve their operations by using responses from artificial intelligence. We can use the answers we receive to correct ourselves – update the website and all online information available regarding the Archives (e.g. the old address on SAZG website, if the service still lists it in its answers) and clarify our publicly available data on archival materials (e.g. a description of the fonds of the Royal Police Commission for the City of Zagreb in which it can be explicitly stated that the material contains certain data, but contained only through entries in indexes and registry logs, and not a special record with only that data). Procedural instructions can be specified and explained more explicitly (e.g., by stating that, as a rule, researchers conduct their own research at the Archives, whereas Archives staff undertake research on behalf of users only upon the submission of specific requests and-as a rule-subject to a fee). In the event of a large number of inquiries regarding records not held by the Archive, it is possible to state on the official website that such records do not exist in the Archive.

DISADVANTAGES

It can be assumed that artificial intelligence will create an increasing number of customers who are not inclined to independently research and read long texts, but rather to get answers quickly, even if they are not completely accurate. Artificial intelligence can create the impression among archive users that all archival records are accessible and easily searchable-or even that archivists exist specifically to search through them on their behalf-and that all a client needs to do is send an email with a list of their requests.

In some cases, the AI service provides incorrect information (citing sources that do not exist) or incomplete information. The more follow-up questions are asked and additional clarifications sought, the more precise and accurate the AI service's responses can become. However, the question remains as to how many clients will actually ask more than a few questions or know which answers need to be verified.

Artificial intelligence, as well as the information it processes, is constantly increasing and renewing itself. We can assume that, in the future, it will have increasingly more (accurate) information. It remains a winning combination: artificial intelligence in the hands of an expert who knows how to utilize accurate information while also investigating and identifying its errors.

REFERENCES

HR-DAZG-6 Kraljevsko redarstveno povjerenstvo za Slobodni kraljevski glavni grad Zagreb

https://daz.hr/vodic/site/article/hr-dazg-6-kraljevsko-redarstveno-povjerenstvo-za-slobodni-kraljevski-glavni-grad-zagreb accessed on October 6, 2026.

(Description of the fonds in the Online Guide of the State Archives in Zagreb.)

HR-DAZG-12 Uprava policije grada Zagreba https://daz.hr/vodic/site/article/hr-dazg-12-uprava-policije-grada-zagreba/1/4 accessed on October 6, 2026.

(Description of the fonds in the Online Guide of the State Archives in Zagreb.)

SUMMARY

The text presents examples of responses provided by an artificial intelligence service to user inquiries regarding research into individuals who lived in Zagreb around 1900. It analyzes the accurate and inaccurate information supplied by the service and draws conclusions regarding how artificial intelligence both assists and hinders users and archives. It also suggests ways in which artificial intelligence in this form can help archives improve their operations.

Typology: 1.02 Review article