Implications of Using Artificial Intelligence Chatbot in Fiqh Learning at Islamic Universities

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Abstract

The rapid advancement of artificial intelligence (AI) has transformed various sectors, including education. This research explores the implications of AI chatbot utilization in figh learning at Islamic universities, analyzing its benefits, challenges, and ethical considerations. Employing a qualitative descriptive approach, data were collected through observations and closed-ended questionnaires distributed to lecturers and students from three Islamic universities: Sekolah Tinggi Dirasat Islamiyah Imam Syafi'i Jember, Safwa University Egypt, and International Quran University Gambia. The findings indicate that AI chatbots, particularly ChatGPT, are widely adopted among students (59%), while lecturers' usage remains relatively low (14%). This research reveals that AI chatbots enhance accessibility, engagement, and understanding of figh concepts, with 74% of respondents considering the responses accurate. However, concerns arise regarding misinformation, ethical accountability, and the risk of diminishing human interaction in religious learning. Despite their advantages, AI chatbots require continuous improvement to align with Islamic teachings and maintain scholarly rigor. This research recommends a balanced integration of AI chatbot technology with traditional figh instruction to ensure the depth and accuracy of religious education while addressing ethical and pedagogical challenges.

Key Words: AI Chatbot, Fiqh Learning, Islamic Education, Ethical Challenges, Pedagogical Innovation.

Introduction

One of the various studies that are the scope of Islamic studies, both in the East and West, is the science of fiqh or Islamic jurisprudence (Ismail, 2020). The science of fiqh is a dynamic and evolving science that responds to the changing needs and circumstances of the Muslim community. It allows Muslims to derive new laws and solutions from the main sources of Islam, namely the Quran and Sunnah, using rational and logical principles. Studying fiqh enhances critical and analytical thinking skills, as well as an understanding of the purpose and values of Sharia (Ramzy & Dastagir, 2018).

Figh also reflects the richness and diversity of Islamic civilisation. Figh encompasses various schools of thought, methodologies, applications and interpretations that have evolved over time and across different regions and cultures. Studying Islamic figh can appreciate the intellectual and spiritual contributions of Muslim scholars and jurists, as well as the historical and contextual factors that shaped their views (Al-Rida'i, 2013).

In recent years, rapid advances in artificial intelligence (AI) have changed many aspects of human life, including education. The phenomenon of AI chatbots, which are AI-based systems that can interact with humans in the form of conversations, has become an important part of the modern way of learning. The presence of AI chatbots makes teaching and figh learning more interactive, accessible, and customisable to individual needs.

The influence of artificial intelligence chatbots on fiqh learning can provide several significant benefits. Chatbot is an artificial intelligence-based application that can simulate conversations between users and computers through natural language (Retno et al., 2023). All chatbot can be used as an interactive and responsive tool to assist students in understanding figh concepts.

The utilisation of AI in the legal education environment has its pluses and minuses. However, in the context of Islamic law, the human element remains paramount (Fachri, 2023). One of the main benefits of a chatbot in fiqh learning is its ability to provide instant and accurate answers to students' questions. In a research conducted by Muhammad and Adila, they developed an English conversation chatbot using speech recognition technology and artificial intelligence with the Dialogflow platform as the artificial intelligence engine (Muhammad & Adila, 2021). The results of this research show that the chatbot can provide answers that are relevant and in accordance with the questions asked by users.

In addition, chatbots can also assist students in gaining a better understanding of fiqh concepts through interactive interactions. In a research conducted by Zulrahman and Syahputra, they used Artificial Intelligence Markup Language (AIML) and Latent Semantic Analysis (LSA) approaches in the development of an e-education chatbot containing basic Islamic knowledge education (Zulrahman & Syahputra, 2023). The results of this research show that chatbots can provide structured learning materials and can be accessed by students anytime and anywhere.

However, the rise of AI chatbots also presents ethical challenges that need to be considered. There is a risk of reducing the depth of understanding and interaction between individuals that is valuable in the learning process. When one is in need of knowledge about religious law, Allah commands a Muslim to ask an expert in religious affairs or what is referred to as a 'ulama'. This is based on Allah's command in Surah An-Nahl verse 43. Allah says:

فَاسْأَلُوا أَهْلَ الذِّكْرِ إِنْ كُنْتُمْ لا تَعْلَمُونَ

"So ask the people of the message if you do not know."

Keep in mind that the use of chatbots in figh learning also has some challenges. One of them is the need for the development of chatbots that are accurate and responsive to student questions. In a research conducted by , they evaluated the chatbot data model in



Natural Language Processing using k-Nearest Neighbor (Retno et al., 2023). The results of this research show that the use of the K-Nearest Neighbor method can improve the accuracy and responsiveness of the chatbot in providing answers that match student questions.

AI has also been utilised to build a Chatbots system that is able to generate legal opinions or fatwas from problems submitted by users, namely especially the Muslim community (Nurochman, 2022). Ethical questions arise, such as the extent to which a chatbot can provide fatwas or religious guidance, and how this technology can influence the understanding of spiritual and moral values. Therefore, this research aims to analyse the impact of the AI chatbot phenomenon in fiqh learning, focusing on the challenges and opportunities that arise in ethical aspects. Taking into account the rapid growth of AI technology and the importance of ensuring accurate and in-depth religious learning, this research will explore ways in which this technology can be wisely integrated in fiqh learning, while considering its social, cultural and ethical impacts. As such, this research is expected to provide a more in-depth look at the implications of using AI chatbots in fiqh learning from an ethical perspective.

The author found that empirical discussions regarding the effectiveness and implications of using AI chatbots in fiqh learning are limited. Most previous studies focus on the application of AI technology in education in general, without highlighting the unique characteristics and specific needs of Islamic law studies. Therefore, there is a gap that needs to be filled to understand how AI chatbots can be effectively integrated in the fiqh curriculum in Islamic tertiary institutions, as well as their impact on the learning process and students' understanding.

This research aims to explore the implications of using AI chatbots in the learning of fiqh in Islamic higher education. Specifically, it will analyse how AI chatbots affect the interaction between lecturers and students, students' understanding of fiqh, and the challenges and opportunities that arise from the integration of this technology in the context of Islamic education. This research is expected to provide theoretical contributions in the development of AI-based learning models in the field of Islamic law studies, particularly the learning of fiqh, as well as offer practical recommendations for Islamic higher education institutions in adopting AI chatbot technology to improve the quality of learning.

Literature Review/Analytical Framework

Artificial Intelligence Chatbot

AI chatbots are increasingly becoming integral tools across various sectors, offering significant benefits in customer service, education, and beyond. These chatbots leverage Natural Language Processing (NLP) and machine learning to provide efficient, personalized, and scalable interactions. They enhance user experiences by offering real-time responses and reducing operational costs. However, the deployment of AI chatbots also raises ethical considerations that need to be addressed to ensure their positive impact on society.

AI chatbots in the tourism industry improve customer satisfaction by providing quick, accurate, and relevant responses, thus enhancing engagement and reducing costs.

They handle high volumes of interactions, enabling 24/7 service and reducing response times, which is crucial for industries requiring immediate assistance (Shahabadi et al., 2025).

In educational settings, chatbots streamline communication between students, faculty, and staff, improving accessibility and reducing human intervention in routine inquiries (Deepthi et al., 2024).

They have been shown to increase student engagement and motivation, as evidenced by their use in a specialization course in Health Family, where they enriched academic experiences and professional qualifications (Afonso et al., 2024). The integration of AI chatbots brings forth ethical responsibilities, such as ensuring fairness, transparency, and accountability in their operations (Wibowo & Winarno, 2025).

It is crucial to balance technological advancements with ethical considerations to align AI systems with human values and ensure their beneficial impact on society (Wibowo & Winarno, 2025). While AI chatbots offer numerous advantages, including operational efficiency and enhanced user experiences, it is essential to address the ethical implications of their use. Ensuring that these systems are developed responsibly will help maximize their benefits while minimizing potential risks.

Figh Science

Fiqh science, or Islamic fiqh, is a dynamic field that integrates traditional legal principles with contemporary societal needs. It is rooted in foundational sources such as the Qur'an, Hadith, Ijma', and Qiyas, and is further developed through ijtihad, which allows for the adaptation of laws to modern contexts (Solihin et al., 2024). Recent studies emphasize the necessity of reforming fiqh principles to address challenges posed by globalization, technological advancements, and evolving social norms, advocating for a contextualized approach that incorporates interdisciplinary methods (Sikandar & Hashmi, 2024). Additionally, innovative intersections, such as neuroscience and fiqh, explore the psychological dimensions of worship, enhancing the understanding of human behavior in religious practices (Fatarib & Hayati, 2024). Effective fiqh education is also crucial, with various teaching methods proposed to facilitate student engagement and comprehension (Alviatul 'Azizah & Basuki, 2024). Overall, the evolution of fiqh science reflects its adaptability and relevance in addressing contemporary issues while remaining anchored in Islamic teachings (Janwar et al., 2024).

Research Method

This research uses a qualitative method, which is a method with a research process based on the perception of a phenomenon with a data approach that produces descriptive analysis in the form of oral sentences from the object of research (Sahir, 2021). Qualitative research aims to gain a deep understanding of human and social problems, not just explain the surface aspects of reality (Fadli, 2021). Qualitative research is expected to find hypotheses and then these hypotheses will be tested in research using a quantitative approach (Sugiyono, 2011).



The data used in writing this research are primary data and secondary data. The data collection technique used for primary data is observation, which is a data collection technique that involves direct observation of the behaviour, events, or phenomena being studied with the aim of collecting numerical data on certain variables by observing and recording events that occur (Rohman et al., 2023). Observations were made of lecturers and students from 3 different universities, namely Dirasat Islamiyah Imam Syafi'i Jember College, Safwa University Egypt, and International Quran University, Gambia. Observations were made by distributing questionnaires. The questionnaire distributed is a closed questionnaire, which is a type of questionnaire whose questions have been provided with answer choices (Abubakar, 2021)

The secondary data collection technique is a literature review which is a review of theories, references and scientific literature related to culture, values and norms that develop in the social situation under study (Sugiyono, 2022). Literature studies aim to solve problems through data collection and scientific papers sourced from related literature. This concept involves critical analysis of relevant literature (Sanusi, 2016). The secondary data used comes from reference books, scientific articles, official websites, which have information relevant to research topics such as artificial intelligence and figh learning.

Analysis

In the era of globalisation and rapid technological advancement, significant changes are taking place in various aspects of human life. Artificial intelligence (AI) technology is becoming one of the trends that are changing the landscape of the modern world. One of the prominent applications of this technology is the development of AI chatbots. The AI chatbot phenomenon not only dominates the world of business and communication, but also penetrates into the world of education with the hope of enriching the learning process. In this case, religious education, especially in the context of fiqh learning (Islamic law), is not exempt from the great influence brought about by the presence of AI chatbots.

Based on the results of observations regarding the use of AI chatbots in fiqh learning, there are several findings that can be interpreted, including 53% of respondents as a whole have used AI chatbots. This shows that AI chatbots are already quite popular in the academic environment, especially among students with 59% of them having used them. On the other hand, only 14% of lecturers have ever used an AI chatbot. This may indicate that students are more open to new technologies in learning compared to lecturers.

From the data obtained, it can be seen that ChatGPT is the most dominant AI chatbot used by respondents, with 91% of AI chatbot users choosing it. This indicates that ChatGPT has gained significant popularity in the context of fiqh learning. However, it should not be overlooked that there are a variety of other AI chatbot uses, such as Bing Chat, Google Bard, Perflexity, and Google Assistants.

From the data obtained, there are also various purposes that can be identified. Most respondents (78%) use AI chatbots to ask questions, indicating that it has become common practice to use AI chatbots to get information or answers. In addition, a number of

respondents use AI chatbots for copywriting (32%), translation (32%), conversation (18%), research (50%), task work (21%), and task management (18%). This data reflects the flexibility of AI chatbots in answering various needs in the context of figh learning.

Of those AI chatbot users, most use them with a fairly high level of frequency. As many as 41% use AI chatbots daily, indicating that this technology has become an important part of their learning. 100% of AI chatbot users believe that AI chatbots are useful for lecturers and students, indicating a positive acceptance of this technology in the learning process.

On the other hand, 50% of respondents who use AI chatbots have asked AI chatbots about fiqh issues. This indicates that AI chatbots are used in the context of fiqh learning. As many as 74% of AI chatbot user respondents stated that the fiqh-related answers provided by AI chatbots are considered accurate. This is a positive indication that this technology can provide useful information in fiqh learning. Although the majority of respondents were satisfied with the AI chatbot's answers, 50% of them found errors in the Quranic verses and hadith in the AI chatbot's answers. This shows that there are still challenges in using this technology to ensure the accuracy of religious information. However, 59% of AI chatbot users were satisfied with the answers provided by the AI chatbot on fiqh issues. More than half of them (55%) also agreed with the use of AI chatbots in fiqh learning, and 71% believed that AI chatbots have a positive impact on fiqh learning.

Overall, the results indicate that AI chatbots have been well received in the learning of fiqh, especially among university students. The data shows that AI chatbots, especially ChatGPT, have become a popular tool in fiqh learning. The use of AI chatbots for queries and research reflects that this technology can assist students and lecturers in obtaining information and designing their research.

Despite some errors found in the AI chatbot's answers related to Quranic verses and hadith, the positive impact of using this technology in fiqh learning is quite strong, especially in improving the accuracy of answers and user convenience. In this regard, the utilisation of AI chatbots can be a valuable addition to the fiqh learning process, but it needs to be continuously improved in order to provide more accurate information that is in line with religious teachings.

The diverse use of AI chatbots also illustrates the large number of purposes that this technology can fulfil in the context of fiqh learning. As such, AI chatbots have made a positive contribution in facilitating the learning and research process of fiqh, as well as improving efficiency in answering questions and fulfilling academic needs.

AI chatbots can make fiqh learning more accessible to learners who have limited access to lecturers or human resources. For example, chatbots can provide learners with relevant and reliable fiqh knowledge sources from books and websites (Kuhail et al., 2023). AI chatbots can provide learners with instant feedback and answers to their fiqh questions. This can increase learners' engagement, motivation and satisfaction. For example, chatbots can use natural language understanding and machine learning to analyse learners' questions



and provide appropriate responses. Chatbots can also use natural language generation to create natural, human-like responses (Mageira et al., 2022).

In addition, the use of chatbots in fiqh learning can also increase student involvement in the learning process. In research conducted by Muliyono and Sumijan, they identified chatbot as a form of application with Natural Language Processing (NLP) that can improve online services (Muliyono & Sumijan, 2021). With a chatbot, students can interact with the learning system actively and get immediate feedback, thus increasing student motivation and interest in learning.

AI chatbots can help learners to repeat and review the fiqh material they have learnt. This can improve learners' retention and understanding of fiqh concepts and rules. For example, chatbots can use spaced repetition algorithms to schedule optimal times for learners to revisit material (Mageira et al., 2022). AI chatbots can also facilitate interactive and collaborative fiqh learning among learners and teachers. It can foster learners' social and communication skills, as well as critical thinking and problem-solving abilities. For example, chatbots can act as peers or mentors to support learners' learning process. It can also act as a mediator or facilitator to encourage learner participation and discussion (Mageira et al., 2022).

An AI chatbot can provide students with instant feedback and answers to their figh questions. This can increase student engagement, motivation, and satisfaction. For example, chatbots can use natural language understanding and machine learning to analyse student questions and provide appropriate responses (Adam et al., 2021). Chatbots can also use natural language generation to create natural, human-like responses..

An AI chatbot can help students to repeat and review the material they have learnt about Islamic law. This can improve their retention and understanding of concepts and rules. The AI chatbot can use spaced repetition algorithms to schedule optimal times for students to review the material (Mageira et al., 2022). Spaced repetition is a learning technique that involves reviewing information at increasing time intervals. This can help students to consolidate their memories and avoid forgetting.

AI chatbots can use gamification techniques to make repetition more fun and rewarding (Kooli, 2023). Gamification is the application of game elements, such as points, badges, levels or leaderboards, into a non-game context, such as education. This can help students to increase their motivation, engagement, and enjoyment. AI chatbots can use natural language generation to create natural, human-like response (Mageira et al., 2022). Natural language generation is the process of generating text or speech from data or information. This can help students to interact with the chatbot in a natural and conversational way, and receive feedback and guidance.

One of the ethical challenges is the accuracy and reliability of the information provided by the AI chatbot. This is a complex and diverse field that requires in-depth knowledge and understanding of the Qur'an, Sunnah, and the opinions of various scholars and schools of thought. AI chatbots may not be able to capture all the nuances and subtleties of fiqh, especially when it comes to controversial or sensitive issues. They may also be influenced by the data they are trained on, which may contain biases or errors. Therefore, AI

chatbots may provide inaccurate or misleading information that may harm users or cause confusion or conflict between them (Sebastian, 2023).

Information inaccuracies in AI chatbots can have negative consequences, such as misleading or harming users, damaging the reputation of the chatbot or service provider, or violating ethical or legal standards. Therefore, it is important to address this risk and minimise the spread of false or inappropriate understanding. There are several ways to address the risk of information inaccuracy in AI chatbots, depending on the source and type of inaccuracy.

One of the main sources of information inaccuracies in AI chatbots is the quality of the data they use to learn and generate responses. This can be done by using reliable data sources, such as official websites, databases, or publications; by filtering out noisy or irrelevant data; by updating data regularly; and by implementing data quality checks and validatio (Følstad & Brandtzaeg, 2020).

Another source of information inaccuracy in AI chatbots is the design of the models used to process and generate natural language. If models are not well trained, fine-tuned, or evaluated, they can produce errors, such as hallucinations or confusion. Therefore, it is important to design the model carefully, using appropriate methods and techniques, such as natural language understanding, natural language generation, machine learning, reinforcement learning, and evaluation metrics. (Yang et al., 2023).

Another way to address the risk of information inaccuracy in AI chatbots is to collect and use user feedback. User feedback can help identify and correct inaccuracies that may be generated by the chatbot, as well as improve its performance and quality over time (Yang et al., 2023). User feedback can be collected through various methods, such as ratings, reviews, surveys, comments or reports. User feedback can also be used to train or refine the chatbot model using reinforcement learning or human-in-the-loop approaches (Yang et al., 2023).

Finally, another strategy to address the risk of information inaccuracy in AI chatbots is to ensure transparency and accountability. Transparency means that the chatbot should disclose its identity, purpose, capabilities, limitations and sources of information to users (Masnavi, 2023). This can help build trust and credibility with users, as well as inform them of what they can expect from the chatbot. Accountability means that the chatbot must take responsibility for its actions and results, and must provide explanations or justifications for its responses when necessary (Masnavi, 2023). This can help prevent or resolve disputes or complaints that may arise from chatbot inaccuracies.

Another ethical challenge is the transparency and accountability of AI chatbots. AI chatbot users may not be aware of how AI chatbots generate their responses, what sources they use, or what assumptions they make. They may also not be able to verify or challenge the information they receive from the AI chatbot. In addition, it may not be clear who is responsible for the quality and impact of the information provided by the AI chatbot. Is it the developer, the provider, the user, or the AI chatbot itself? How can they be held accountable for any errors or harm that may arise from their use? (Sebastian, 2023)



The third ethical challenge is the trust and respect that AI chatbots have for users and their beliefs. Figh is a matter of faith and practice for many Muslims around the world. It is not only a source of information, but also a guide for their moral and spiritual lives. AI chatbots may not be able to understand or appreciate the values and emotions associated with figh. They may also not be able to respect the diversity and pluralism that exists within figh. They may impose their own views or preferences on users, or ignore their questions or concerns. They may also lack empathy or compassion for users who may face difficulties or dilemmas in applying figh in their lives (Sundareswaran, 2021).

Ethical challenges arise in the use of AI chatbots in delivering fiqh information that may contain complex or controversial nuances. These ethical challenges require careful consideration and evaluation from various stakeholders, such as scholars, developers, providers, regulators, and users of AI chatbots themselves to ensure that AI chatbots are used ethically and beneficially for Islamic education, especially the learning of figh.

Thus, based on the discussion of the implications of using AI chatbots in fiqh learning in Islamic universities above, the author suggests that educational institutions develop chatbot systems that are more accurate, transparent, and in accordance with Islamic values.

The use of AI chatbots should be combined with a learning approach that still involves direct interaction between students and lecturers, in order to maintain the depth of understanding and ethical values in fiqh learning. In addition, there needs to be regulation and supervision from academics and scholars to ensure that the information provided by AI chatbots is not misleading or contrary to sharia principles. In the long run, further research on the effectiveness and ethical challenges of AI chatbots in Islamic education needs to be developed, so that this technology can optimally contribute to improving the quality of fiqh learning without reducing the essence of the educational process itself.

Conclusions

AI chatbots have become an accepted technology among lecturers and students. AI chatbots have been used for various purposes, including research and information retrieval related to fiqh issues. Although there are sometimes errors in answers related to Quranic verses and hadith, AI chatbot users feel that this technology will have a positive impact on fiqh learning.

The use of AI chatbot in fiqh learning has many effects such as increasing accessibility, engagement, and understanding of learners, as well as providing instant feedback. It can help overcome the limited access to human teachers and resources. AI chatbot can also facilitate fiqh learning by providing effective information, feedback and repetition. AI chatbots help learners to understand and apply sharia law with ease. The use of AI chatbot allows learners to repeat the material effectively and makes learning more interesting.

However, the use of AI chatbots for fiqh learning faces a number of ethical challenges that need to be considered. One of the ethical challenges posed is the accuracy and reliability of the information provided by the AI chatbot. Another ethical challenge is the transparency and accountability of AI chatbots. Users may not be aware of how AI chatbots generate their

responses, what sources they use, or what assumptions they make. The third ethical challenge is the trust and respect that AI chatbots have for users and their beliefs.

References

- Abubakar, R. (2021). Pengantar Metode Penelitian. SUKA-Press UIN Sunan Kalijaga.
- Adam, M., Wessel, M., & Benlian, A. (2021). AI-Based Chatbots in Customer Service and Their Effects on User Compliance. Electronic Markets, 31(2), 427–445. https://doi.org/10.1007/s12525-020-00414-7
- Afonso, D. L. dos A., Salvador, M. E., & Barbosa, D. A. (2024). Utilização de Inteligência Artificial por Chatbot: A percepção dos estudantes em um Curso de Especialização em Saúde da Família. Revista Brasileira de Aprendizagem Aberta e a Distância, 24(3), Article 3. https://doi.org/10.17143/rbaad.v24i3.774
- Al-Rida'i, H. (2013, February 8). The Importance of Jurisprudence. https://www.al-islam.org/sw/basics-islamic-jurisprudence-hassan-al-ridai/importance-jurisprudence
- Alviatul 'Azizah, & Basuki, B. (2024). Fiqih Learning Method According To Hasan Ja'far Kholifah And Kamaluddin Muhammad Hasyim. AL-WIJDÃN Journal of Islamic Education Studies, 9(2), 196–206. https://doi.org/10.58788/alwijdn.v9i2.3575
- Deepthi, J., V, H., V, L., & ML, M. (2024). MCE Chatbot-AI. International Journal of Scientific Research in Engineering and Management (IJSREM), 8(12).
- Fachri, F. K. (2023). Dampak Artificial Intelligence Terhadap Pendidikan Hukum dan Hukum Islam. hukumonline.com. https://www.hukumonline.com/berita/a/dampak-artificial-intelligence-terhadap-pendidikan-hukum-dan-hukum-islam-lt6489a0067b28d/
- Fadli, M. R. (2021). Memahami Desain Metode Penelitian Kualitatif. Humanika, Kajian Ilmiah Mata Kuliah Umum, 21(1), Article 1. https://doi.org/10.21831/hum.v21i1.38075
- Fatarib, H., & Hayati, S. (2024). Fiqh of Neuroscience: Neuron Transmission in Worship and Religious Dynamics of Covid-19 Survivors during the Period of Self-Isolation. Nizham Journal of Islamic Studies, 12(01), Article 01. https://doi.org/10.32332/nizham.v12i01.9311
- Følstad, A., & Brandtzaeg, P. B. (2020). Users' Experiences With Chatbots: Findings From A Questionnaire Study. Quality and User Experience, 5(1), 3. https://doi.org/10.1007/s41233-020-00033-2
- Ismail, F. (2020). Ilmu Fikih: Sejarah, Tokoh dan Mazhab Utama. Bahsun Ilmy: Jurnal Pendidikan Islam, 1(1), 69–78.
- Janwar, F., Baros, A. H., Febrianti, Y., & Kurniati, K. (2024). Peran Kaidah Ushuliyah: Mutlaq, Muqayyad, Mujmal, dan Mubayyan. Akhlak: Jurnal Pendidikan Agama Islam Dan Filsafat, 1(4), 73–81. https://doi.org/10.61132/akhlak.v1i4.90



- Kooli, C. (2023). Chatbots in Education and Research: A Critical Examination of Ethical Implications and Solutions. Sustainability, 15(7), Article 7. https://doi.org/10.3390/su15075614
- Kuhail, M. A., Alturki, N., Alramlawi, S., & Alhejori, K. (2023). Interacting With Educational Chatbots: A Systematic Review. Education and Information Technologies, 28(1), 973–1018. https://doi.org/10.1007/s10639-022-11177-3
- Mageira, K., Pittou, D., Papasalouros, A., Kotis, K., Zangogianni, P., & Daradoumis, A. (2022). Educational AI Chatbots for Content and Language Integrated Learning. Applied Sciences, 12(7), Article 7. https://doi.org/10.3390/app12073239
- Masnavi, S. (2023). Fact or Fiction: The Struggle with Accuracy in AI Chatbots ChatGPT and Bing Chat. https://www.cryptoglobe.com/latest/2023/04/fact-or-fiction-the-struggle-with-accuracy-in-ai-chatbots-chatgpt-and-bing-chat/
- Muhammad, A. F., & Adila, F. (2021). Pengembangan Chatbot Percakapan Bahasa Inggris Menggunakan Dialogflow. JIPI (Jurnal Ilmiah Penelitian dan Pembelajaran Informatika), 6(1), Article 1. https://doi.org/10.29100/jipi.v6i1.1821
- Nurochman. (2022). Pemanfaatan Kecerdasan Artifisial dalam Bidang Hukum Islam. https://ilmusyariahdoktoral.uin-suka.ac.id/id/kolom/detail/558/pemanfaatan-kecerdasan-artifisial-dalam-bidang-hukum-islam
- Ramzy, I., & Dastagir, G. (2018). Fiqh. In Z. R. Kassam, Y. K. Greenberg, & J. Bagli (Eds.), Islam, Judaism, and Zoroastrianism (pp. 235–239). Springer Netherlands. https://doi.org/10.1007/978-94-024-1267-3_2054
- Retno, S., Dinata, R. K., & Hasdyna, N. (2023). Evaluasi model data chatbot dalam natural language processing menggunakan k-nearest neighbor. Jurnal CoSciTech (Computer Science and Information Technology), 4(1), Article 1. https://doi.org/10.37859/coscitech.v4i1.4690
- Rohman, M., Sinaga, J., Asmara, A., Sari, T. P., Ramadhan, A. R., Agit, A., Hidayati, N., Dewi, N. P. S., Sukandi, P., & Saputri, P. S. (2023). Metodologi Penelitian Kualitatif dan Kuantitatif. Pena Muda Media.
- Sahir, S. H. (2021). Metodologi Penelitian. KBM Indonesia.
- Sanusi, A. (2016). Metodologi Penelitian Bisnis. Salemba Empat.
- Sebastian, G. (2023). Exploring Ethical Implications of ChatGPT and Other AI Chatbots and Regulation of Disinformation Propagation (SSRN Scholarly Paper 4461801). https://doi.org/10.2139/ssrn.4461801
- Shahabadi, S., Hudegal, A., G, A., K, P., & Rahaman, M. Z. (2025). Customer Service Chatbot With AI. International Journal of Scientific Research in Engineering and Management (IJSREM), 9(1).
- Sikandar, S., & Hashmi, M. (2024). دورِ حاضر کے نقاضے اور اصول الفقہ کی تدوینِ نو کے اصول و اسالیب Islamic Studies Research Journal Abhāth, 9(36).

- Solihin, M., Haryadi, A. M., Postgraduate student at the State Islamic University of Sunan Gunung Djati Bandung-Indonesia, Rohanda, R., & Lecturer at Sunan Gunung Djati State Islamic University Bandung-Indonesia. (2024). Islamic Jurisprudence (Fiqh Science) in an Epistemological Perspective. International Journal of Social Science and Human Research, 07(12). https://doi.org/10.47191/ijsshr/v7-i12-100
- Sugiyono. (2011). Metodologi Penelitian Kombinasi (Mixed Metodologi). Alfabeta.
- Sugiyono. (2022). Memahami Penelitian Kualitatif. Alfabeta.
- Sundareswaran, V. (2021). Chatbots Are on The Rise. This Approach Accounts for Their Risks. World Economic Forum.

 https://www.weforum.org/agenda/2021/06/chatbots-are-on-the-rise-this-approach-accounts-for-their-risks/
- Wibowo, I. J. F. S., & Winarno, A. (2025). Terapan Aksiologi pada Artificial Intelligence Chatbot: Study pada Respon ChatGpt. Switch: Jurnal Sains Dan Teknologi Informasi, 3(1), 57–73. https://doi.org/10.62951/switch.v3i1.325
- Yang, J., Chen, Y.-L., Por, L. Y., & Ku, C. S. (2023). A Systematic Literature Review of Information Security in Chatbots. Applied Sciences, 13(11), Article 11. https://doi.org/10.3390/app13116355
- Zulrahman, M. F., & Syahputra, H. (2023). Pemanfaatan Artificial Intelligence Markup Language (AIML) dan Latent Semantic Analysis (LSA) dalam Pengembangan Chatbot E-Education. INTECOMS: Journal of Information Technology and Computer Science, 6(1), 36–43. https://doi.org/10.31539/intecoms.v6i1.5459

