# Christians Facing the Challenges of Artificial Intelligence

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## Abstract

*The development of artificial intelligence technology is, on the one hand, the fulfillment of God's task given to humanity (Genesis 1 and 2), and on the other hand, in humans' desire to be like God, it is a rebellion against God (Genesis 3:5). Therefore, Christians face numerous challenges in their relationship with artificial intelligence systems. These challenges can be categorized into two fundamental groups. The first group includes challenges where Christians have and will have the choice of responsible use of AI systems, while the second group consists of AI systems controlled by powerful corporations or by AI systems themselves. The text provides a brief introduction and overview of the levels of artificial intelligence development (ANI, AGI, and ASI) and the relationship of Christians towards them. The central part of the discussion is dedicated to the spiritual evaluation of AI systems and tools, especially those that have spiritual consequences in their application. The process of comprehensive spiritual evaluation must be rooted in the Word of God and guided by the Holy Spirit, and the quality of the spiritual evaluation of AI systems for Christians will come as a result of their daily relationship with God. Regarding artificial intelligence, the most important task of the church today and tomorrow is to train and educate believers in AI literacy and biblical-spiritual literacy so that they can independently and effectively make decisions in all situations involving the use of AI systems, machines, and applications. The final section of this article brings an evaluation of the development and application of AI concerning goals that oppose God, such as creating eternal life and god-like machines.*

**Keywords**: *artificial intelligence, ANI, AGI, ASI, goals in AI development, Christians and AI, evaluation of AI*

## Introduction

Artificial intelligence technologies have been significantly advancing since the mid-twentieth century, and their applications are becoming increasingly prevalent in everyday life in the twenty-first century. Artificial Intelligence (AI) is transforming humanity faster and deeper than any technology before. The average reader and consumer of AI technologies may feel overwhelmed just by listing the systems, applications, and machines powered by artificial intelligence. We encounter them daily in various areas of human life from smartwatches, mobile phones, cars, homes, and cities to powerful robots, drones, and supercomputers controlled by artificial intelligence. Facing the applications of artificial intelligence in everyday life and the announcements of its future development and application challenges Christians to constantly evaluate everything in the light of God's word.

Based on this, the first part of the article provides a brief introduction and overview of the levels of development in artificial intelligence (ANI, AGI, and ASI) and the relationship Christians have with them. The second and central part of the discussion is dedicated to the spiritual evaluation of AI systems and tools, especially those that, in their application, have and cause negative spiritual consequences. The process of comprehensive spiritual evaluation must be rooted in the Word of God and guided by the Holy Spirit, and the quality of the spiritual evaluation of AI systems for Christians will come as a result of their daily relationship with God. Regarding artificial intelligence, the most important task of the church today and tomorrow is to train and educate believers in AI literacy and biblical-spiritual literacy so that they can independently and effectively make decisions in all situations involving the use of AI systems, machines, and applications. In the third part of the article, an assessment is made regarding the development and application of AI concerning goals that oppose God, such as the creation of eternal life and god-like machines.

## 1. Overview of Levels in the Development of AI

The editors of the *Encyclopedia Britannica* (2023) defined artificial intelligence as "the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings." Microsoft's AI tool Copilot also refers to this definition: "Artificial intelligence (AI), often abbreviated as AI, refers to the ability of computers or computer-controlled robots to perform tasks that are typically associated with intelligent beings. This term is often applied to the development of systems that have the ability to reason, discover meaning, generalize, or learn from past experiences." The development of computer systems that can think, reason, and learn based on data and experiences can be tracked at three levels: narrow artificial intelligence, general artificial intelligence, and arti-

ficial superintelligence. ChatGPT refers to them as levels of artificial intelligence with varying degrees of complexity and scope of capabilities.

*Artificial Narrow Intelligence* (ANI) represents systems we are familiar with today, which are specialized in solving one or a few problems within the same domain and can perform individual, automated, and repetitive tasks. It is used in numerous areas, such as internet searching, online shopping and advertising, digital personal assistants, machine translation, smart homes, cities, and infrastructure, security features in cars, autonomous vehicles, navigation, cybersecurity, as well as healthcare, transportation, manufacturing, agriculture, and public administration. Particularly popular is generative artificial intelligence, which deals with creating various content such as images, music, text, and videos. An extended list of ANI applications can be generated on ChatGPT, which, when asked, "What are the application areas of ANI?", listed ten areas with specific applications in each of them. The actual list of application areas of artificial intelligence systems includes numerous known and unknown aspects of human life and activities. Only the areas with positive public perception, such as those mentioned, are commonly highlighted publicly, while the development and application of AI systems in some areas, especially in the military industry, biotechnological, and space research, are skillfully concealed. ANI is currently the only type of artificial intelligence we know of that exists in public use today (ChatGPT).

Much has been written and debated about the negative aspects of AI systems and tools, and questions about their negative impact on humanity and interpersonal relationships will continue to be asked and discussed for a long time. I posed a question to ChatGPT about the negative aspects of AI, and I received the following response: "Artificial intelligence has its potential negative applications that can raise concerns. Some of the problems and challenges include: privacy, security risks, discrimination, job loss, misuse of artificial intelligence, ethical challenges, technology dependence, and lack of transparency." It was added that: "It is important to note that many of these negative aspects can be mitigated or avoided through careful design, ethical programming, transparency, and responsible use of artificial intelligence. It is also crucial to work on establishing regulations and guidelines that will ensure responsible use of this technology."

The regulation and direction of the development of artificial intelligence have been partially taken over by the European Union through an agreement among its member states in February 2024 to adopt the Artificial Intelligence Act,[1] which still needs formal approval from the European Parliament and the Council of the EU.[2] Once the Artificial Intelligence Act is confirmed, it will serve as European

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1   EU Artificial Intelligence Act (https://artificialintelligenceact.eu/ (accessed on February 14, 2024).

2   This article was written and submitted to the publisher before the completion of the process of confirming the Act in the European Parliament and the Council of the European Union.

legislation on artificial intelligence and thus will become the first law on artificial intelligence. The applications of artificial intelligence technologies and systems in the Act are categorized into three risk categories: first, systems and applications that create unacceptable risks are prohibited; second, high-risk systems and applications will be regulated in more detail; third, other applications that are not explicitly prohibited or listed as high-risk are mostly unregulated.

*Artificial General Intelligence* (**AGI**) is the ability of an intelligent system to understand or learn any intellectual task that a human being can understand. The goal of general artificial intelligence is to create systems that would be able to understand the world like any other human being and provide solutions to the problems they face. The goal is to create humanoid machines (robots) that would become capable of self-control, self-adjustment, and self-understanding. These machines would be wiser and more intelligent than humans and proactive and interactive like humans. Therefore, the development of artificial wisdom intelligence (AWI) is rapidly progressing.

Transhumanist, inventor, and futurist Ray Kurzweil predicted in his book *The Singularity Is Near: When Humans Transcend Biology* (2005) that within a few decades, information-based technologies will encompass all human knowledge and skills, ultimately including pattern recognition powers, skills solving problems and the emotional and moral intelligence of the human brain itself. To the question "What is a singularity?" Kurzweil (2005, 7) answered:

> What, then, is the Singularity? It's a future period during which the pace of technological change will be so rapid, its impact so deep, that human life will be irreversibly transformed. Although neither utopian nor dystopian, this epoch will transform the concepts that we rely on to give meaning to our lives, from our business models to the cycle of human life, including death itself. Understanding the Singularity will alter our perspective on the significance of our past and the ramifications for our future. To truly understand it inherently changes one's view of life in general and one's own particular life.

According to transhumanists, the time of singularity is very close, and the development of AI systems that will surpass human intelligence to such an extent that many will consider it akin to a "god" is rapidly progressing far from the public eye. Kurzweil predicted that singularity would occur around the year 2045. Other scientists differ in their predictions as to when this will happen. Research by artificial intelligence experts published in 2016 showed (Ng 2020) that there is a 90 percent chance of achieving Artificial General Intelligence (AGI) by the year 2075. However, Zack Kass, one of the creators of ChatGPT, has shortened that timeframe and claimed that scientists will create AGI by the year 2030.[3]

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3   That information was shared in February 2024 at the "Visionary of the Year" conference in Zagreb. See more in the article: Jedan od tvoraca ChatGPT-ja: "Čeka nas najuzbudljivije razdoblje u povijesti čovječanstva. AGI ćemo stvoriti do 2030." https://www.tportal.hr/tehno/clanak/

What do the development and application of general artificial intelligence technologies bring us? Answering this question with certainty is very difficult. Experts, including transhumanists and futurists, indicate some key applications of AGI technologies. For example, Ray Kurzweil sees the convergence of humans and machines as an inevitability that will bring significant benefits. In an article for the *Encyclopedia Britannica Anniversary Edition: 250 Years of Excellence,* he wrote (2018): "…we will ultimately merge with our machines, live indefinitely, and be a billion times more intelligent…all within the next three to four decades." According to this prediction and the state of artificial intelligence development, we could soon experience both voluntary and involuntary implantation of brain chips into every human, enabling individuals to be directly and continuously connected to powerful computer systems. Here is an example of this prediction.

The news about the implantation of an experimental brain chip in the first human made a strong impact on the world media at the beginning of 2024.[4] Neuralink, a company owned by billionaire Elon Musk, announced that they used a robot to surgically implant brain-computer interface (BCI) implants in the region of the brain that controls movement intention. The initial goal of the implanted interface is to enable people to control a cursor or keyboard on a computer using only their thoughts. This initial goal of assisting patients in overcoming paralysis and a range of neurological conditions is very noble and serves as a successful means to achieve the ultimate goal. Under the pretext of connecting the human brain to help address complex neurological conditions, Musk's Neuralink, along with many other startups, is strongly advancing towards the implantation of brain-computer interfaces (BCI) into every human brain and connecting them to powerful AI machine systems. It is important to note that in the current stage, the brain-computer interface is assisting people in need, but very soon, it will serve the purpose of manipulating human lives. This will lead to the creation and organization of a powerful "organization" or "agency," as Bostrom (2006, 53) called it, which will accomplish the task of controlling, fixing, and directing humanity.

***Artificial Super Intelligence* (ASI)** is the third level of AI development. It is considered a logical progression and continuation of AGI, with the prediction that it will surpass all human capabilities. Powerful corporations are striving to create a superintelligent computer that learns and develops autonomously (self-aware computer), understands its environment without the need for supervision, and can control, guide, and transform the world around it. Research and development of superintelligent computer systems are accelerating rapidly every day and moving in numerous directions, mostly according to the desires and goals

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4    Here I am using a report from Reuters: Elon Musk's Neuralink implants brain chip in first human. https://www.reuters.com/technology/neuralink-implants-brain-chip-first-human-musk-says-2024-01-29/.

of wealthy individuals and powerful corporations. Among the myriad of goals, most of which serve the benefit of humanity, I highlight two goals that currently appear to be the greatest threat to humanity. Their "working" names are *singleton* and *god-like AI*.

Some scientists believe that artificial superintelligence could be like a monolithic, super intelligent machine called a "singleton" a single decision-making agency at the highest level, so powerful that no other entity could threaten its existence (Bostrom 2006, 53). The development of AI technologies and systems contributes to and facilitates the creation of a singleton that will employ improved surveillance (including reliable lie detection), mind-control technologies, and communication technologies (Bostrom 2006, 53). Hence:

> A singleton is a plausible outcome of many scenarios in which a single agency obtains a decisive lead through a technological breakthrough in artificial intelligence or molecular nanotechnology. An agency that had obtained such a lead could use its technological superiority to prevent other agencies from catching up, especially in technological areas essential for its security (Bostrom 2006, 54).

The term "god-like AI" is increasingly mentioned as a goal in AI development. Research by artificial intelligence experts published in 2016 showed (Ng 2020) that there is a 75 percent chance of achieving artificial superintelligence (ASI) by the year 2105. However, the leaders of OpenAI announced recommendations for managing artificial superintelligence in 2023, which they believe could be achieved in less than 10 years (Altman, Brockman, and Sutskever 2023). The ongoing development of AI technologies, systems, and applications has not only provided a range of everyday life applications but also enabled the development and creation of superintelligent systems according to the desires of powerful individuals and corporations. In response to the question of what kind of superintelligence we want, Winyard (2016, 203) answers: "That, of course, depends on who answers the question: So far, AI research has produced skilled game players, but hedonists want sex toys; Kurzweil[5] wants a super-inventive genius; Bostrom[6,] a

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5    Ray Kurzweil is one of the leading global transhumanists, futurists, and inventors. He is a co-founder and Chancellor of Singularity University and the Director of Engineering at Google, where he leads a team focused on machine intelligence and natural language understanding. Kurzweil is best known as the principal inventor of the CCD flatbed scanner, optical character recognition of multiple fonts, speech-to-text reading machine for the blind, text-to-speech synthesizer, and a range of other inventions. He has received numerous awards and recognitions for his outstanding contributions to technology. His most influential books include *The Singularity Is Near* (2005) and *How to Create a Mind* (2012). More about him can be found at https://www.kurzweiltech.com/aboutray.html.

6    Nick Bostrom is a Swedish philosopher and polymath with expertise in theoretical physics, computational neuroscience, logic, philosophy, and artificial intelligence. He works as a professor at the Faculty of Philosophy at the University of Oxford. He is the founding director of the

likeminded philosopher; Waser[7], a cooperative collaborator; Benek[8], a Christian; and, of course, Rothblatt[9] wants to build god."

This brief overview of the levels of artificial intelligence development will be rounded off with a summary generated by ChatGPT:

> ANI represents specialized artificial intelligence for specific tasks, AGI denotes general intelligence with human-like abilities, while ASI is a hypothetical superior intelligence that could surpass the best human minds in all areas. It is important to note that we are currently in the ANI phase, while AGI and ASI are still theoretical concepts that pose challenges and questions for the future development of artificial intelligence.

## 2. Christians' Relationship to Artificial Intelligence Technologies

Christians constantly encounter AI systems and tools, and it is nearly impossible to avoid them. Some of these systems and tools are highly useful and improve our lives, while others are created for entertainment and pleasure. Yet others are designed for gathering and distributing information for various known and unknown purposes. This confronts Christians with a multitude of challenges in their relationship with artificial intelligence, ranging from God's blessings to direct rebellion against God. I have divided these challenges into two fundamental groups. In the first group are the AI challenges where we have and will have the choice of responsible usage. The majority of today's AI systems and applications fall into this group. We have the choice of whether to use a smart medical or sports watch powered by artificial intelligence. We have the choice of using generative AI. We have multiple choices in whether to use the internet and everything it offers when combined with AI tools. We have the choice to experience both the positive and negative consequences of using AI tools. The second group of challenges includes AI systems and machines that will be [ir]responsibly controlled

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multidisciplinary research center Future of Humanity Institute, which enables a select group of exceptional mathematicians, philosophers, and scientists to carefully consider global priorities and major questions for humanity. More about him can be found at: https://nickbostrom.com/#bio.

7    Mark Waser is the Chief Technology Officer (CTO) at the Government Blockchain Association.

8    Pastor Christopher J. Benek describes himself as a global expert in technology and theology, internationally recognized for his social and religious analyses and commentaries. He is known as a techno-theologian, futurist, ethicist, Christian transhumanist, public speaker, writer, and tech pastor. He is the co-founder and president of the Christian Transhumanist Association. He is regarded as the first self-identified ordained Christian transhumanist in the world. (Source: https://www.christopherbenek.com/about/).

9    Martine Aliana Rothblatt is an American lawyer, author, entrepreneur, and advocate for transgender rights. More about her can be found at: https://en.wikipedia.org/wiki/Martine_Rothblatt.

by powerful corporations or AI systems themselves. Solutions to these challenges we will have to leave to God because the rebellion of artificial intelligence against God will go so far that there will be no human solution, only God's solution.

In the development and application of artificial intelligence technologies, there are and will be countless dangers. Like any technology, artificial intelligence can be used for both good and evil. A minority gathered around leading tech giants believes that the use of artificial intelligence technologies will significantly improve the quality of life, emphasizing the benefits of using known AI technologies in everyday life. On the other hand, there is a large group of scientists and intellectuals who see a huge danger in the use and abuse of AI, with the likely possibility that intelligent machines will take control of humans in the near future.[10] However, most people often do not think about the negative impacts of AI technologies, but they do notice and comment on such consequences. A banal but very instructive example is the use of smartphones, which help in everyday communication and finding information that interests people, while at the same time constantly directing them not to think about anything and rely on AI for everything. This process of using smartphones leads to dependence on AI, acceptance of control and manipulation by those who manage AI systems, and ultimately, the conscious subordination of humans to AI systems. Alongside the positive impacts on society, there are also noticeable negative impacts that steadily and daily lead people into social isolation.

## 2.1. Utilizing AI Systems and Applications in Christian Ministry

Regarding the question of whether Christians can and should use AI in Christian ministry, the apostle Paul provided an answer long ago: "'I have the right to do anything', you say—but not everything is beneficial. 'I have the right to do anything'—but not everything is constructive" (1 Cor 10:23). Christians should filter their response to this question through two lenses of Scripture: the filter of *spiritual usefulness* and the filter of *spiritual edification.* Christians can use artificial intelligence, and many do. However, whether and to what extent Christians will use AI tools depends on their beliefs and values, especially on the quality of their relationship with God.

Many Christians are enthusiastic about certain AI applications and use them to spread the gospel. For example, an AI-powered *chatbot* can answer questions

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10  This is supported in the short statement in the "Statement on AI Risk": "Mitigating the risk of extinction from AI should be a global priority alongside other societal-scale risks such as pandemics and nuclear war." It was signed by more than seven hundred AI experts and public figures, including Bill Gates (Gates Ventures), Sam Altman (CEO of OpenAI), Ilya Sutskever (Co-Founder and Lead Scientist of OpenAI) and Shane Legg (Lead Scientist for general artificial intelligence – AGI and co-founder of Google DeepMind). The statement was published in 2023 by the Center for AI Safety (https://www.safe.ai/statement-on-ai-risk).

about Christianity, find biblical references, and prepare teachings and sermons. Artificial intelligence can find, analyze, group, and present information from the Bible, but it cannot inspire a message without which every teaching and sermon is rendered ineffective. Preaching is God's word addressed to people through the Holy Spirit. AI does not have a personal relationship with God or spiritual understanding, so it cannot do the work of the Holy Spirit or replace the inspiration that comes from God.

Tools of ANI are increasingly being used in the field of biblical studies and theology, as well as in church administration and pastoral work. Their usage is multifaceted. They assist in translating Bible text from the original languages, finding passages in the Bible, and analyzing them, facilitating the identification of key themes. Here we encounter the issue of training artificial intelligence tools. Namely, the question is on which templates the artificial intelligence trained. The results greatly depend on the templates/texts used to train and shape AI systems. For example, an AI system trained in the translation of the Jehovah's Witnesses Bible likely does not provide the same answers to specific questions as the translation of the NIV Bible. An AI system trained on the Bible and various religious texts may provide biblically accurate answers, but there is a higher likelihood that it will draw information from all texts and provide a "religiously correct" answer that is likely to be biblically incorrect.

AI systems can analyze users' spiritual preferences and provide personalized recommendations for further reading or study. In this area, the user of an AI system can easily fall into the trap of "personalized advertising," where the AI system often offers similar texts to those the user has shown interest in. In such cases, AI can take on the role of the Holy Spirit in studying the Bible and in the relationship with the triune God: the Father, the Son, and the Holy Spirit. Artificial intelligence offers the user what they "want to hear, see, and read" in the Holy Scriptures, rather than what the Holy Spirit personally wants to convey and communicate to them through the Scriptures.

AI systems can be excellently used for discipleship, biblical study, and educating believers in the church. As believers have increasingly less time available weekly to attend church for Bible study and prayer, *chatbots* and virtual assistants based on AI can provide believers with answers to many questions important for understanding the Bible and spiritual growth in faith. In that case, the time of community gatherings of believers can be focused on serving God and one another, as well as fellowship.

Answers, pieces of advice, and information provided to Christians by artificial intelligence depend on the data and how the machine is programmed, as well as the worldview biases of the AI creators. Artificial intelligence can provide accurate biblical information as well as incorrect information that leads to heresy. Therefore, Christians should verify the information and solutions provided by

AI through multiple sources. Christians can use AI for studying and interpreting the Bible, but AI tools cannot replace their relationship with God. Artificial intelligence lacks spiritual understanding, and the Bible should always be read and interpreted with the guidance of the Holy Spirit.

### 2.2. Spiritual Assessment of AI

We are faced with the application of artificial intelligence technologies daily, and whether we want that or not, we will increasingly encounter and use them (consciously or unconsciously). In doing so, we assess this technology based on various criteria such as attractiveness, usefulness, popularity, price, etc. For every technology, including AI systems and tools, their creators and vendors highlight the facts that suit them, while skillfully concealing and downplaying those that do not contribute to their financial gain. Christians should evaluate every AI tool based on various parameters, especially those AI systems and tools that have spiritual implications in their application. This requires comprehensive spiritual discernment rooted in the Word of God and guided by the Holy Spirit. The quality of spiritual discernment of AI systems, machines, and applications will be ensured to Christians through their daily relationship with God. Considering artificial intelligence, the most important task of the church today and tomorrow is to train and educate believers in AI literacy and biblical-spiritual literacy so that they can independently and effectively make decisions in all situations involving the use of AI systems, machines, and applications.[11]

AI literacy is a set of skills and competencies necessary for effectively using artificial intelligence technologies and applications that are present in everyday life, from healthcare and finance to education and entertainment. The increasingly prevalent artificial intelligence systems strongly influence spiritual, social, cultural, and political relations and interactions, shaping the understanding of the present and future world. AI literacy thus becomes one of the key skills for understanding the positive and negative impacts of AI technologies and systems, both on individuals and on social communities.

Biblical literacy is the ability to read, understand, interpret, and apply the foundational teachings and truths of the Bible related to various contexts. It involves the ongoing study of the Bible and the application of what is learned concerning

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11 For this occasion, I am using UNESCO's working definition of literacy: "Literacy is the ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts. Literacy involves a continuum of learning in enabling individuals to achieve their goals, to develop their knowledge and potential, and to participate fully in their community and wider society. Generally, literacy also encompasses numeracy, the ability to make simple arithmetic calculations. The concept of literacy can be distinguished from measures to quantify it, such as the literacy rate and functional literacy" (UNESCO 2004, 13).

the triune God: the Father, the Son Jesus Christ, and the Holy Spirit, as well as all other relationships, including relationships with people and communities, relationships with God's creation and products of human creativity. The fundamental goal of biblical literacy is the continuous and consistent following of Jesus Christ (discipleship) in understanding and applying the Holy Scriptures "so that the servant of God may be thoroughly equipped for every good work" (2 Tim 3:17).

The history of humanity would be significantly different if Christians had invested more in biblical-spiritual literacy. We cannot change historical events, but we can learn a lot from them about the application of biblical-spiritual literacy. What does this mean for today? What is biblical-spiritual literacy? I have briefly explained biblical literacy, and now I will add spiritual literacy to it.

Spiritual literacy is the ability to perceive the spiritual realm and understand and interpret spiritual events and the consequences of spiritual forces at work in the world. Biblical-spiritual literacy is the ability to gain insight into the spiritual world as revealed by the Bible; the ability to understand and interpret spiritual events based on the Holy Scripture; the ability to recognize the workings of dark forces in the contemporary world and to effectively apply all biblical tools (such as God's Word and the gifts of the Holy Spirit) for sound judgment of AI technologies, systems, and applications. I believe that for Christians, spiritual literacy is most important in evaluating AI systems and technologies, especially at the second and third levels of AI development, namely the development of artificial general intelligence (AGI) and artificial superintelligence (ASI). At the second and third levels of artificial intelligence development, scientists, by devising and creating systems and machines that will be like humans and like God (god-like AI), interfere with God's part of the creative plan, directly and indirectly opposing God, much like Satan.

For born-again Christians, the most important thing is spiritual discernment of artificial intelligence systems and tools in the light of God's Word. The apostle Paul encourages us: "Do not quench the Spirit. Do not treat prophecies with contempt but test them all; hold on to what is good, reject every kind of evil" (1 Thess 5:19-22). Paul's exhortation directs Christians to a process of spiritual discernment that includes: first, acknowledging the work of the Holy Spirit; second, reflecting on prophetic words on the particular subject; third, testing everything, from the work of the Spirit to the truthfulness of prophecies and everything related to artificial intelligence; fourth, based on discernment holding on to what is good and useful; fifth, avoiding evil and every shadow of evil. I am convinced that today it is most important to thoroughly examine the spiritual influences of AI technologies on our lives and piety. As an example, consider the spiritual impact of a smartphone, which, on one hand, provides instant access to all sorts of information and communication with many people, but on the other hand, we notice that people around us, despite this communication connectivity, are increasingly lonely and

isolated. Solitude and loneliness are spiritually detrimental to Christians because the Bible strongly emphasizes that we are created for fellowship, living relationships with one another, and expressing brotherly love (Jambrek 2022, 111–131).

Spiritual discernment of everything, including artificial intelligence, begins in a relationship with God and his Word. The Psalmist affirmed this biblical truth long ago when he wrote to God the Creator: "Your word is a lamp for my feet, a light on my path" (Ps 119:105). The apostle Paul emphasized the importance and purpose of God's written Word in the Bible: "All Scripture is God-breathed and is useful for teaching, rebuking, correcting and training in righteousness, so that the servant of God may be thoroughly equipped for every good work" (2 Tim 3:16-17). James, on the other hand, clearly points to the process of discerning everything, including AI systems and tools: "God opposes the proud but shows favor to the humble. Submit yourselves, then, to God. Resist the devil, and he will flee from you. Come near to God and he will come near to you" (James 4:6-8). When interpreting and applying God's truths in Paul's and James' exhortations, it is important to be careful not to label AI technology as inherently bad or devilish. Technology is inherently good because it is built on and utilizes the laws that God the Creator embedded into the world through creation. Today's scientists have been able to discover these laws and apply them in various areas of human life, including artificial intelligence. Therefore, AI technology is good, but AI systems and tools can be consciously or unconsciously programmed and used for devilish purposes, such as manipulation and control of the human mind or for warfare.

In spiritual and biblical-theological discernment of artificial intelligence, it is valuable to consult the document *Artificial Intelligence: An Evangelical Statement of Principles*, in which a group of leaders from evangelical churches in the USA succinctly provided guidelines for biblical assessment of twelve key areas of AI impact.[12]

In the development of AI, thousands of experts with different worldviews, goals, motivations, and desires have been and are involved. By programming machine learning models, they consciously, and often unconsciously, determine the choice of knowledge and behavior of the machine. In the process of spiritual discernment, we must therefore ask ourselves what are the prevailing worldviews, philosophical, and spiritual systems behind artificial intelligence and their relationship to God and God's word. For example, the transhumanist philosophy strongly influences the development of humanoid artificial intelligence technologies, while "transhumanist theology" prepares the ground for a theological equat-

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12  The document "Artificial Intelligence: An Evangelical Statement of Principles" was published in 2019 by The Ethics & Religious Liberty Commission of the Southern Baptist Convention (USA). The document was translated into Croatian and published in 2023 under the title: Umjetna inteligencija: evanđeoska izjava načelâ in the journal *Kairos: Evanđeoski teološki časopis* 17/2 (2023): 209–220.

ing of robots and humans concerning God.[13] Bainbridge points out a common criticism that believers direct at transhumanists that the use of technology to create a different humanity is equivalent to "playing God." The development of technologies such as cryonic freezing, brain scanning, and computerized personality capture promoted by transhumanists is considered by evangelical Christians as wrong, playing God with mind, body, or spirit (Bainbridge 2005, 96).

Joanna Ng (2020) takes the example of the reflections of the highly influential physicist Stephen Hawking, who believed that when we reach ASI (artificial superintelligence), "(AI) will take off on its own, and redesign itself at an ever-increasing rate. Humans, who are limited by slow biological evolution, couldn't compete and would be superseded." Hawking assumed, Joanna Ng emphasizes, that humans are just brains, no different from computers. Hawking's viewpoint, popular within the AI community, presupposes (1) evolution, (2) the absence of God, and (3) humanity as nothing more than objects. Therefore, she compares the research and future application of artificial superintelligence (ASI) to the construction of the Tower of Babel (Gen 11:1-9).

Some scientists, such as Nick Bostrom and Stephen Hawking, consider science to be absolute, thus denying all biblical and theological assumptions and arguments. Although this is widely known, it is worth noting here that human greed for money and the desire for power, influence, and control are inexhaustible motivational forces behind technological advancement. The competition among old and new technology companies in the development and application of artificial intelligence is highly dynamic, driven by profit, power, and control. Ian Hogarth (2023) in the article "We must slow down the race to God-like AI" emphasizes that so far, the AI race has been primarily driven by money. There is no indication whatsoever that it will be any different in the future.

## 3. Evaluation of AI Development and Implementation in Light of Goals That Oppose God

The AI we encounter today is, figuratively speaking, just a mild warming up for what lies ahead. The achievements so far indicate that there is a range of goals for the development and implementation of AI technologies. Some of these goals are publicly announced and well-known, a large part of them is only hinted at

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13  In the article Aliens Will Play a Part in The Technological & Theological Singularity Benek (2016a) states the following: "From a theological and technological standpoint, angels and demons are similar to human beings in that they are artificial general intelligence (AGI) created by God. If we consider that all matter is divine technology, then the ordering of this technology by God into autonomous, rational and self-autonomous beings is the creation of divine AGI. According to the Biblical narrative these beings too, like humanity, have the choice to act in ways that are either good or evil."

philosophically and futuristically, and some, such as goals in the military industry, are carefully concealed. Christians have a God-given task to judge everything, including the ultimate goals of AI development. Since we are not aware of all the ultimate goals of AI development, here I will list only those goals that are known to us.

*Supremacy, power, and control.* Research, development, and application of artificial intelligence are motivated by an inexhaustible desire for power and supremacy, as well as the authority that this power provides and the control with which that supremacy would be maintained as long as possible. Hence the relentless race in the research, development, and application of artificial intelligence. The goal is for a small group of people or agencies (singleton hypothesis) to achieve and maintain power as quickly as possible, which would be equal to the power demonstrated by God in creating all existing things, with humanity as the pinnacle of creation.

*Health, longevity, and eternal life.* Improving humanity to create eternal life is one of the important tasks of technological development in artificial intelligence. Since God is the only master of eternal life, human interventions aimed at improving humanity for longevity and eternal life lead to direct conflict with God. Eternal life is given by God and accepted through faith. Man cannot produce it unpunished. The Bible clearly states that earthly life ends with the death of every person, and as the final enemy, death will be abolished at the second coming of Jesus (1 Cor 15:26).

*Wisdom.* Creating a machine that will be as wise as or even wiser than humans. Since the Bible emphasizes that wisdom comes from God, human creation of wise machines is in direct conflict with God. James reminds us: "If any of you lacks wisdom, you should ask God, who gives generously to all without finding fault, and it will be given to you" (James 1:5). God alone gives wisdom.

*Creation of life.* The goal is to create a humanoid machine (humanoid robot) "in the image of man," which will be the same as or superior to humans in every way. This reminds us of attempts to mimic God's power in creating life and elevate it to God's creative level.

*Creation of a god-like machine.* Leading AI companies (OpenAI, DeepMind, etc.) and many others, known and unknown, are competing to develop artificial intelligence equal to or more powerful than humans. Billions of dollars have been allocated for this purpose. The implicit goal is to create an entity equal to or greater than God. This reminds us of Satan and his attempts to be like God (cf. Isa 14:12-17), but also of numerous reports in the Bible about the destruction of those who ignored and rejected God's authority. A brief account of this is found in the Epistle of Jude (verses 5-11).

*New Religion.* Neil McArthur (2023), a professor at the University of Manitoba, predicts that the increasing presence of artificial intelligence will lead to the

emergence of new religions. He provides several arguments in support of this: First, generative AI, which can create or produce new content, possesses several characteristics often associated with divine beings, such as deities or prophets. Second, generative AI will produce results that can be taken as religious doctrine. It will provide answers to metaphysical and theological questions and engage in the construction of complex worldviews. Third, generative AI may demand worship or actively seek followers. McArthur therefore warns that we should consider "what an unsettling and powerful experience it will be to have a conversation with something that appears to possess a superhuman intelligence and is actively and aggressively asking for your allegiance." I would add to this blind, unquestioning obedience.

Achieving the mentioned goals in the development of artificial intelligence introduces individuals and corporations into direct conflict with God the Creator. The Bible testifies to numerous similar conflicts and their outcomes. The most famous account is that of Satan, who said in his heart: "I will ascend to the heavens; I will raise my throne above the stars of God; I will sit enthroned on the mount of assembly, on the utmost heights of Mount Zaphon. I will ascend above the tops of the clouds; I will make myself like the Most High" (Isa 14:13-14). By his goals and statements, Satan directly opposed God. As a result, God cast him out of heaven. He sinned because of pride and selfish ambition. He was proud of his beauty, personality, charm, authority, position, success (trade), and power. The mentioned goals for the development of artificial intelligence, supported by the pride and selfish ambitions of AI creators, as well as the allure, authority, position, success, and power of individuals and AI corporations, strongly remind me of the biblical account of Satan's goals, success, and fall.

The development of artificial intelligence is, on one hand, fulfilling God's task given to humanity (Gen 1 and 2), and on the other hand, in humans' desire to be like God, it represents rebellion against God (Gen 3:5). Every further advancement in artificial intelligence technologies introduces humanity into a potential deeper conflict with God. It is worth noting that this creative task given by God is limited in such a way that humans cannot comprehend the beginning or end of God's creation. As the Teacher summarized: "I have seen the burden God has laid on the human race. He has made everything beautiful in its time. He has also set eternity in the human heart; yet no one can fathom what God has done from beginning to end" (Eccl 3:10-11).

It is important to remember that while the development of AI is exciting and full of potential, God knows the limits to what can be achieved. The Bible testifies that God drastically punished his own and other nations whenever they crossed the boundary he set. Similarly, with the development of artificial intelligence technologies, if powerful corporations were to cross the boundaries set by God, there could be severe consequences. The realization of an artificial superintelligence

could potentially lead to the destruction of humanity, as feared by leading experts in artificial intelligence,[14] thus serving God for the second coming of Jesus Christ, the final judgment, and all the realities that the Bible indicates will ultimately come to pass. Jesus foretold this: "Immediately after the distress of those days the sun will be darkened, and the moon will not give its light; the stars will fall from the sky, and the heavenly bodies will be shaken. Then will appear the sign of the Son of Man in heaven. And then all the peoples of the earth will mourn when they see the Son of Man coming on the clouds of heaven, with power and great glory. And he will send his angels with a loud trumpet call, and they will gather his elect from the four winds, from one end of the heavens to the other" (Matt 24:29-31).

Most Christians may have little influence on research and development in AI technologies, but "the prayer of a righteous person is powerful and effective" (Jam 5:16-18). The Bible directs us towards fellowship with God, prayer, and spiritual warfare. Let our prayers be for the realization of artificial intelligence by God's will, not against it. Today, more than ever before, we need to effectively apply the instructions of the apostle Paul: "Finally, be strong in the Lord and his mighty power. Put on the full armor of God, so that you can take your stand against the devil's schemes. For our struggle is not against flesh and blood, but against the rulers, against the authorities, against the powers of this dark world, and the spiritual forces of evil in the heavenly realms. Therefore, put on the full armor of God, so that when the day of evil comes, you may be able to stand your ground, and after you have done everything, to stand" (Eph 6:10-13).

We live in a time of fierce spiritual battles, and therefore we need to strengthen ourselves in the Lord, resist the devil's schemes, and overcome all spiritual battles. God created all things and sovereignly reigns over everything. He alone is the omniscient, omnipotent, and omnipresent Creator and Sustainer. Therefore, Christians have nothing to fear, neither in the present nor in the future. It is enough to have reverence for God the Father, Jesus Christ, and the Holy Spirit. In the end, whatever happens in the present and future, let us be sure that Jesus Christ is the Alpha and the Omega, the Beginning and the End (Rev 21:6). To Him be all honor and glory.

## Conclusion

Christians encounter artificial intelligence technologies daily. The development of computer systems capable of thinking, reasoning, and learning based on data and experiences can be observed on three levels with different degrees of complexity and scope of capabilities. These are called: narrow artificial intelligence (ANI), general artificial intelligence (AGI), and artificial superintelligence (ASI).

14 See the "Statement on AI Risk" that was signed by more than hundreds of AI experts.

Research and applications of artificial intelligence raise a series of challenges, concerns, and even fears among Christians, and many experts (both Christians and non-Christians) recognize countless dangers at AGI and ASI levels. Christians need to consider what kind of relationship to cultivate with AI systems, knowing that God has given mankind a creative and exploratory task and freedom for its implementation.

ANI tools are increasingly used in Christian ministry, in the field of biblical studies and theology, as well as in church administration and pastoral work. Christians should filter such use of AI systems through two lenses of Holy Scripture: the filter of *spiritual usefulness* and the filter of *spiritual edification*. A *chatbot* powered by AI can answer questions about Christianity, find biblical references, and prepare teachings and sermons. As previously emphasized, artificial intelligence can find, analyze, group, and present information from the Bible, but it cannot inspire the message without which every teaching and every sermon is rendered ineffective.

Christians should evaluate every AI tool according to various parameters, especially those systems and tools that have spiritual implications in their application. A comprehensive spiritual assessment of AI should be rooted in the Word of God and guided by the Holy Spirit. The quality of spiritual discernment of AI systems, machines, and applications will be ensured for Christians through their daily relationship with God. Considering artificial intelligence, the most important task of the church today and tomorrow is to educate and train believers in AI literacy and biblical-spiritual literacy so that they can make independent and good decisions in all situations involving AI systems. It is important for Christians to responsibly use AI technologies so as not to participate in ignoring or rebelling against God, but rather to use AI tools to glorify God and enhance their relationship with God and with others.

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**Kršćani pred izazovima umjetne inteligencije**

Sažetak

Razvoj tehnologije umjetne inteligencije s jedne je strane ispunjavanje Božjeg zadatka danog čovječanstvu (Post 1 i 2) a s druge strane u želji ljudi da budu poput Boga pobuna protiv Boga (Post 3,5). Stoga se kršćani suočavaju s mnoštvom izazova u odnosima prema sustavima umjetne inteligencije. Ti su izazovi svrstani u dvije temeljne skupine. U prvoj su skupini oni izazovi kod kojih kršćani imaju i imat će izbor odgovornog korištenja UI sustava dok su u drugoj skupini UI sustavi kojima će upravljati moćne korporacije ili pak UI sustavi sami. Tekst pruža kratki uvod i pregled razina u razvoju umjetne inteligencije (ANI, AGI i ASI) te odnos kršćana prema njima. Središnji dio rasprave posvećen je duhovnoj prosudbi sustava i alata UI-ja, posebice onima koji u primjeni izazivaju duhovne posljedice. Proces iscrpne duhovne prosudbe mora biti ukorijenjen u Božjoj riječi i vođen Svetim Duhom, a kvalitetu duhovne prosudbe UI sustava osigurat će kršćanima njihov svakodnevni odnos s Bogom. S obzirom na umjetnu inteligenciju najvažniji zadatak crkve danas i sutra jest obučiti i obučavati vjernike za UI pismenost i biblijsko-duhovnu pismenost kako bi mogli samostalno i kvalitetno odlučivati u svim situacijama korištenja UI sustava, strojeva i aplikacija. U završnom se dijelu naznačuje prosudba razvoja i primjene UI-ja s obzirom na ciljeve koji se suprotstavljaju Bogu, poput stvaranja vječnog života i bogolikog stroja.