

Artificial intelligence and faith

Gilbert Scott Lectures on Science and Faith, Liverpool Cathedral
22nd May, 2024

The Revd Canon Dr Mike Kirby



**Liverpool
Cathedral**

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UNIVERSITY OF
LIVERPOOL

MANCHESTER
1824

The University of Manchester

This talk...just a sample!



Massive, fast-growing subject area



‘Hear’ from different voices –

At the end, I’d like to hear from yours

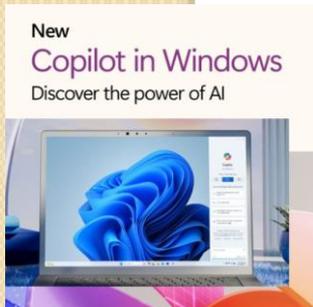
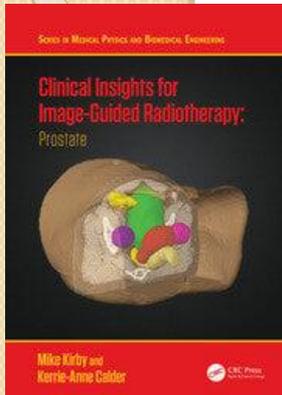


Voices

Myself and my scientific profession
Academic writers
Popular/Accessible
Congregational
Artificial Intelligence

Why....my reasons

- AI in all of our lives – Alexa, Siri, Chatbots (utilities and services), ChatGPT*, Google Bard; Scientific & Medical Use for many years
 - Within my professional work of Radiotherapy and Imaging, it's development for medical purposes has featured now for many years
- My background – Radiotherapy Physicist, not a computer or AI expert. But I need to understand the developments, its abilities and problems; I teach of the developments. I've just included a chapter on AI in my latest text-book on Image-guided Radiotherapy, focussing on Prostate Cancer – out in a few weeks' time.
- AI features in hundreds of computer applications in our everyday lives – **yesterday** Microsoft announced launch of 'Co-pilot', now an integral part of Windows and all MS computers
- Locally, I now live back in Lancashire and have been invited to give some talks and reflections local church discussion group....
 - Because of the prevalence of AI, proposed session on AI and Faith (before Church Times articles); and conducted a small pilot survey with parishioners – to get a 'lie of the land'



*Chat Generative Pre-trained Transformer

Background

- AI in Scientific and Medical Use for quite some time; but also now in utility, financial, leisure, communications, computing, service sectors; on our streets & in our homes
 - Emergence of Large Language Models has been a game-changer - actually giving an 'answer' rather than a Google search result of millions of 'results', from which we choose and compose our answers; this has only been since the development of 'Transformative Architecture' Neural Networks, in 2017
 - *Based on neural network architecture – computer hardware and software designed to work more like the human brain....which is still the most complex organ we know of.*
 - *Humans have about 90 billion neurons; most advanced computer Intelligent Processing Units have about 60 billion transistors*
 - *At its heart, it is high-powered computer programming and hardware with advanced probabilistic and learning-enabled mathematical, computational and image analytical techniques (pattern recognition) drawn from enormous datasets (BIG data!); ability to 'learn' (e.g. through 'reinforcement learning' – rewards (scores) when things are more correct and learning to maximise scores)*
 - *Generative AI (GenAI) tools can create content in multiple forms (incl text, graphs, data, code, images, audio, video, among others) automatically from user entered prompts (UoL 2024)*
 - For commonly accessible AI like ChatGPT and Google BARD, largely driven from whatever information is available on the internet
 - For specific AI programmes used in industry and medicine, often learn from more specific training and very large datasets
 - Intelligent? Understanding? Prof Mike Wooldridge, RI Christmas Lectures (BBC)

George et al.
Urol Oncol: Sem
Orig Invest
40:262-270,
2022

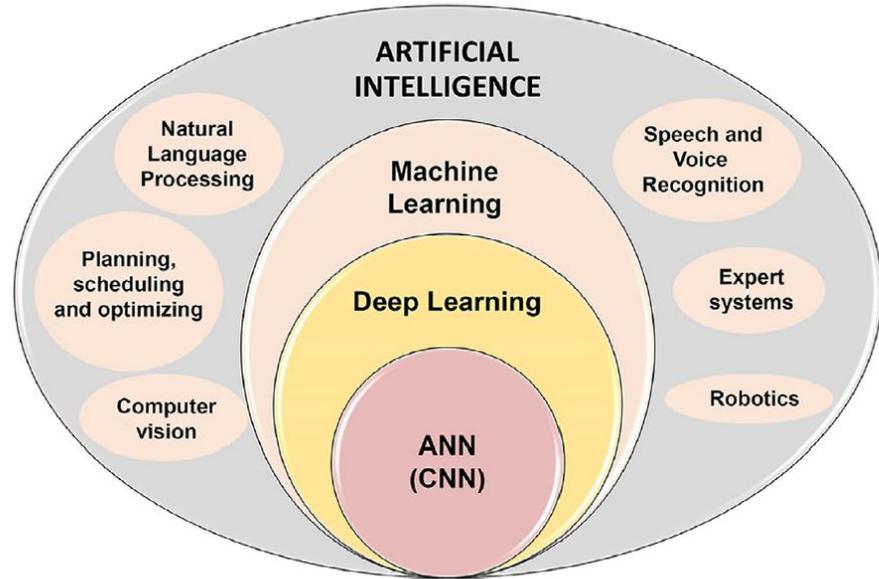


Fig. 2. Artificial intelligence and its relationship between machine learning, deep learning, and artificial neural network/convoluted neural network with fields helping the evolution of artificial intelligence.

Niu et al. Sem
Radiat Oncol
32:365-376,
2022

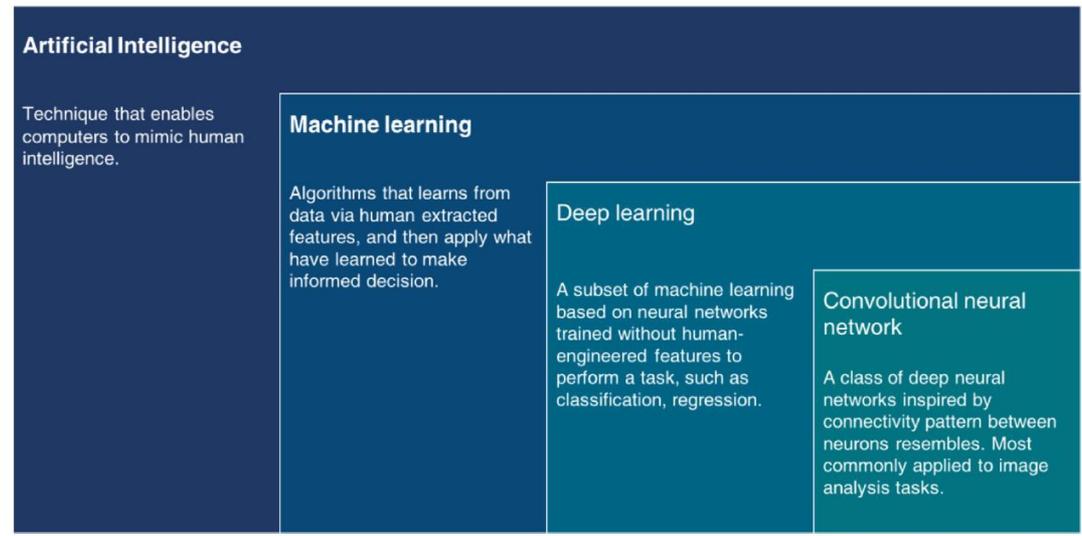
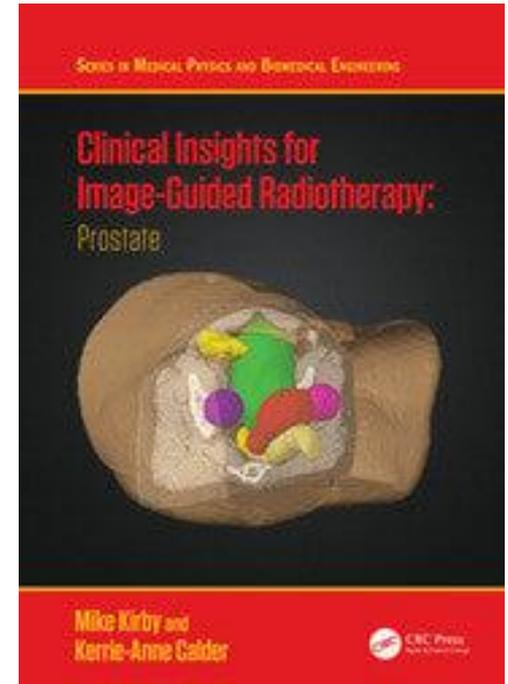


Figure 1 Overview of common concepts and their relationships with each in the AI field: Artificial intelligence, machine learning, deep learning, convolutional neural network. (Color version of figure is available online.)

Professional Voice

BIR ANNUAL RADIOTHERAPY AND ONCOLOGY MEETING 2024

29 FEBRUARY – 1 MARCH
IET SAVOY PLACE, LONDON



3-7 May 2024

Glasgow, UK

ESTRO
2024

Diagnosis

Computer aided detection and diagnosis

Potential validation across thousands of patients – connectivity of worldwide cancer Big Data, datasets

Pathology of biopsy samples – risk stratification; differentiating between malignant and benign cases... 'One-hour-to-diagnosis' trials

Radiological imaging – predictive biomarkers

Human input....

- (Kirby and Calder 2024)

Chiu and Yen *Biomarker Research* (2023) 11:35
<https://doi.org/10.1186/s40364-023-00476-7>

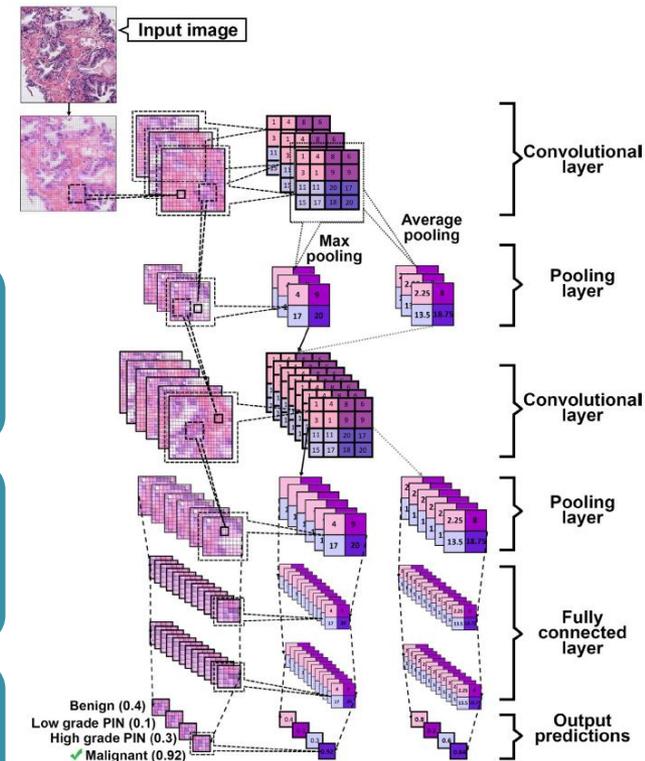


Fig. 4. Schematic representation of convolutional neural network.

George et al. *Urol Oncol: Sem Orig Invest* 40:262-270, 2022

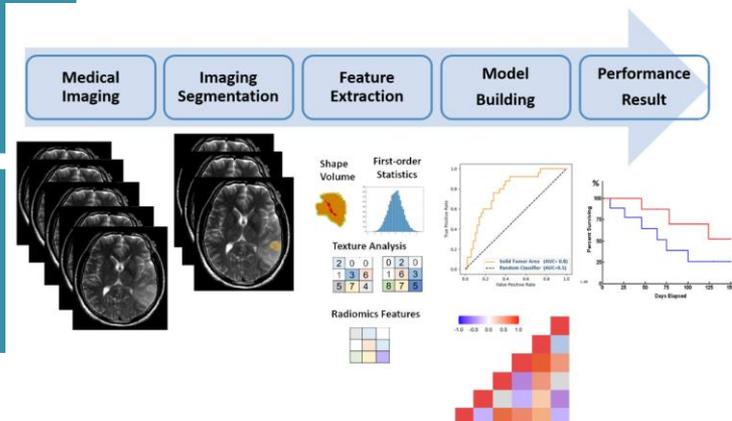
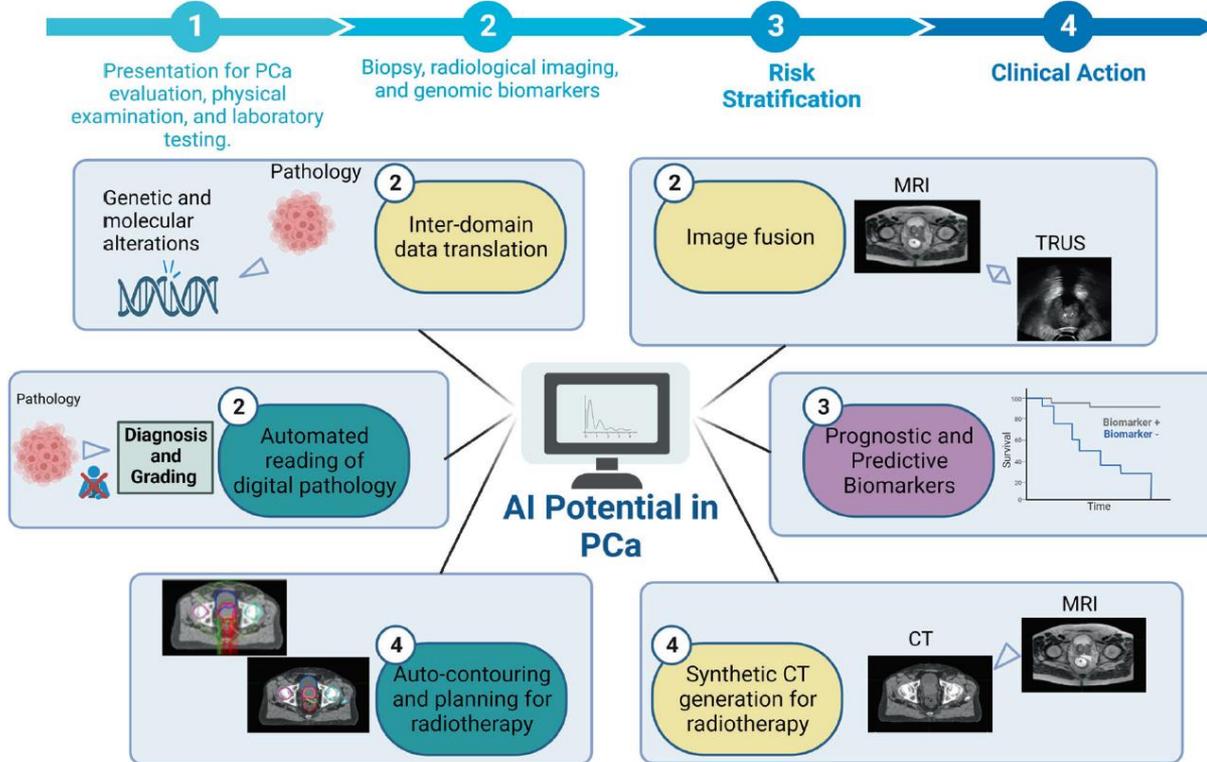


Fig. 3 Radiomics workflow. It refers to the extraction of a vast dataset from medical images, such as CT, MRI, and PET images, or synergistic multimodal imaging, which is the process of finding anomalies, patterns and correlations in clinical information to improve diagnosis and predict prognosis with the goal of delivering precision medicine

Radiotherapy

Presentation to Clinical Action Flow in PCa



- Reduce time from planning scans to start of treatment
- Autocontouring/ autosegmentation –
 - Latest government announcement of rollout (yesterday)/PMQs today
- Generating synthetic CT scans for planning
- AI at heart of online Adaptive RT
- Human input...
 - Kirby and Calder 2024

Baydoun et al.
*Prostate cancer and
 prostatic diseases 2023*

AI software – improving clinical acceptability

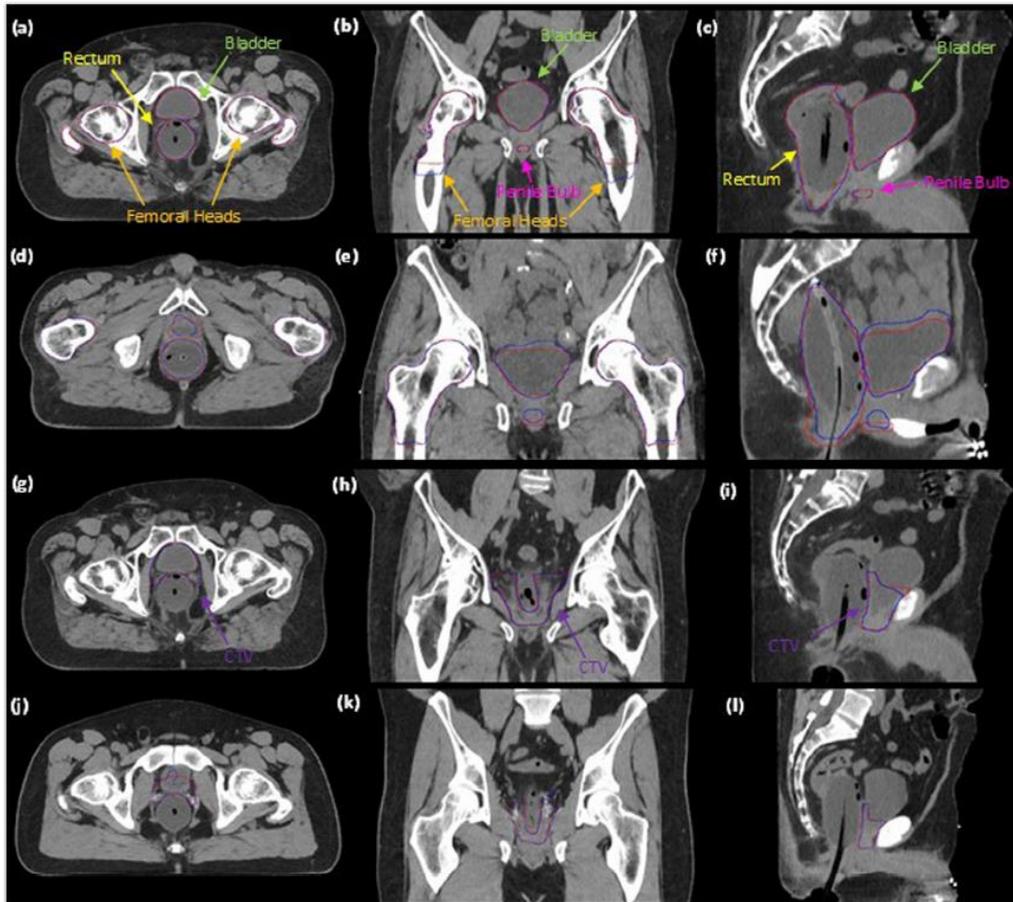


Figure 4 Sixty-case artificial intelligence-model generated (blue) and manual (red) contours for bladder, rectum, femoral heads, and penile bulb, showing one example of good performance (a, b, c) and one example of poor performance (d, e, f). Artificial intelligence 60-case model generated (blue) and manual (red) contours for prostate bed clinical target volume, showing one example of good performance (g, h, i) and one example of poor performance (j, k, l) in 3 views.

- Using institutional data to improve training for image autosegmentation;
- AI models to identify normal tissues and target volumes (areas to be treated)
- Custom training showing good results, even with small datasets
- Human input...
 - Kirby and Calder 2024

Radiotherapy and Radiology

- Challenges
 - Data security; access to Big data
 - Testing and verification of algorithms;
 - Robust training with appropriate data and numbers of datasets;
 - Reasoning in models;
 - Identifying bias in answers and highly uncertain answers;
 - Lack of 'common-sense' because of a lack of ground knowledge/rules/deductive purposes
 - Responsibilities for decision making; system breakdown
 - (Lahmi et al. 2022; Kirby and Calder 2024)

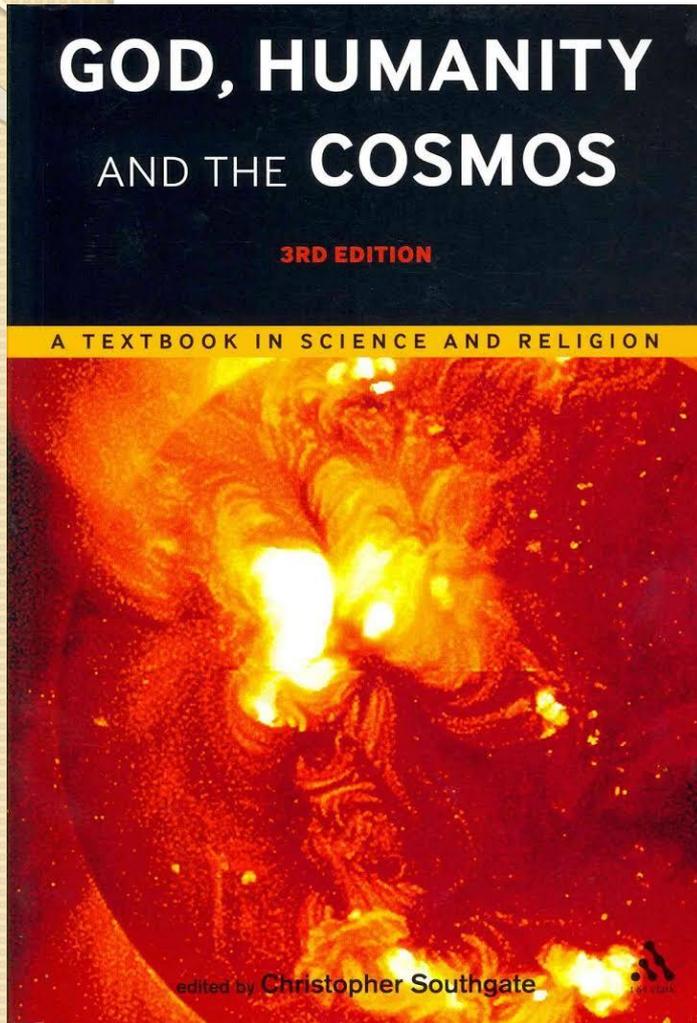
Effect on me...my faith

- Personally – still my calling, to use God-given gifts for helping my patients; love of neighbour
 - Potentially more efficient processes; better treatments; aspects we might not spot as human beings; tools to help make our treatments more effective
- Gifts and fruits of the Spirit in the work being done
 - Wisdom and knowledge
 - Love, kindness, goodness
- Love of patients; God is love....
- Aspects of joy, awe and wonder at human being's creativity – just a fractional image of God's creativity
- Challenges – some need careful checking; where our (Christian) ethics are needed
 - Like many things – 'use' and 'abuse'



Academic Voices

2011, Expert Text, edited by Prof Chris Southgate



'Strong' AI – ALL intelligent human activity simulated in computer programs.....computers of future able to do anything human can do

Computers can re-learn from themselves – reprogramming (Machine Learning)

'More to intelligence than following rules of a computer program....more to being emotional than showing an appropriate emotional display'

God is creator of all things, visible and invisible...implying impossible to exist without dependence upon God; not affected by being product of human beings....so making such a computer (MCK - AI in this decade) an act of 'pro-creation', but not usurp the functions of the creator God any more than biological pro-creation

ARTIFICIAL INTELLIGENCE (AI)

In a world powered by AI, what does it mean to be human?

YouTuber finds path to Jesus via AI

THE YouTuber Siraj Raval's most popular videos teach his 750,000 subscribers how to use artificial intelligence (AI) for financial gain

01 Sep 2023

AI: Could it turn us all into paperclips?

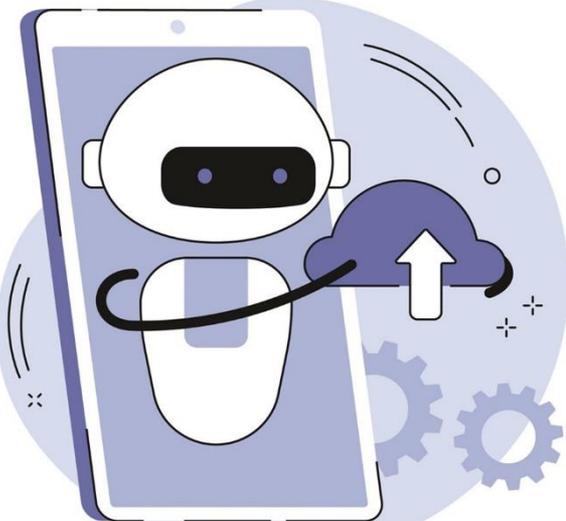
Andrew Brown puts the potential benefits and threats of AI into their political context

01 Sep 2023

AI: It must be more human

Eve Poole is worried about the coding that has been left out

01 Sep 2023



Leader comment: Risk and control: where AI can go badly wrong

01 Sep 2023

AI: The threat of artificial stupidity

01 Sep 2023

AI: Simulation or inspiration?

01 Sep 2023

AI: 'Waffle, waffle, and more waffle'

01 Sep 2023

Book review: *Robot Souls: Programming in humanity* by Eve Poole

01 Sep 2023

World news in brief

18 Aug 2023

Press: Jesus will text you back, but Satan is offline

18 Aug 2023

Letters to the Editor

11 Aug 2023

<https://www.churchtimes.co.uk/topics/artificial-intelligence-ai>

I Sept 2023

<https://www.churchtimes.co.uk/article/s/2023/1-september/features/features>



CT -Various pertinent articles.....

- AI must be more human (Eve Poole)
 - So, does a sentient robot have a soul?
- The threat of artificial stupidity (Andrew Brown)
- Waffle, waffle and more waffle (Cally Hammond)
- Technology managing human bias (Erin Green)
- Simulation or inspiration (Prof Beth Singler talking to Mark Vernon)

'Waffle, waffle and more waffle'

- *The Revd Dr Cally Hammond (Dean of Gonville and Caius Coll, Cambridge); commenting on a commentary written by ChatGPT based on Sunday readings*
- Title above – first impression; style giving ‘no confidence’ in the content
 - Text ‘slippery’; ‘struggle to retain’ – good rhetoric grabs attention and holds it fixed; bad lets words ‘slide through our consciousness....’
- In sermon, congregation takes account of arguments and person preaching; for God as subject, the medium is part of the message
- ChatGPT cannot supply an ‘authentic voice’; someone who has studied, applied and lived by words written
- ‘There is a reason that “author” and “authoritative” are part of the same verbal idea’
 - MCK own experience in academic assessment.....shallow, depth of understanding, peer-reviewed sources

Technology magnifying human bias

- *Dr Erin Green is a theologian researching artificial intelligence and digital justice*
- Digital transformations – related to power; power preserved by excluding people; those denied power are same people who are poorly represented in the development of AI and in our theological and ethical conversations around it
- Gender issues – in some countries, girls less likely than boys to have access to smartphones, internet and basic schooling
- AI gender bias is already apparent – AI can just make already unfair systems even more oppressive
 - Female researchers – 15% at Facebook; less for Google
- ‘Algorithmic bias’ – in reality deep, systemic flaws...just human bias finding its way into new technologies (by accident or design)
- Racial bias could result in racial minorities receiving poorer quality treatment;
 - AI in use for Asylum claims, detecting fraud, pre-sorting applications
- AI often replicate old patterns of bias and discrimination which are all around us
 - MCK – bias in own field, for clinical data; nature of datasets used for training and algorithms used
 - MCK – seeing the whole patient, whole story – not just scans or test results; all feed into the diagnosis; issues of data quality for computer-based methods; issues of human quality of diagnosis

Simulation or inspiration (Prof Beth Singler talking to Mark Vernon)

- *Prof Beth Singler (Asst Prof in Digital Religions, University of Zurich) speaks to Dr Mark Vernon (psychotherapist and writer)*
- “AI will affect religion and religion will affect AI...there is so much overlap between the two fields, from ideas of what it is to be a person to how people might imagine God”
- While religions have texts and practices which could be simulated and possibly AI created....religions exceeds these elements. They are....not amenable to reductive replication
- Some argue, the heart of religion lies not in creeds and texts, amenable to AI analysis, but in embodied practices....; only a living person can find meaning in the act of receiving communion; only one who’s suffered might learn that love can survive the worst calamity.“If this is the wisdom that religions hold, then they will exceed the capacity of technology to imitate them, at least for the foreseeable future”
- AI – ethical blank slates? No; programmed by people and made within environments (often corporations) that embody distinct values
- A world so shaped by AI – people might ‘self-automate’ and stop thinking for themselves, presuming the technology knows best;
 - Assuming that the digital decision is always better than the human one limits our freedoms
- Computers always available – but human listener can offer sense of presence and being understood; computers may help prompt self-exploration, but human expert can open unforeseen vistas and offer nuanced advice
 - MCK - past experiences; always someone else's

University of Liverpool

- GenAI
- Philosophy/ethos – use to promote literacy around the technology in both students and staff, and use technology as openly, honestly and transparently as possible.
- Not substitute for original thought, independent research and produce original work....to support these processes
- Acceptable use, e.g. prep research – but understand not fact-checked content; reproduce inherent bias, inaccurate sources. Can help synthesise ideas (like Google searches, Wikipedia etc. – as info sources but not always reliable)
 - Danger of AI trained from incorrect/unreliable sources
- Unacceptable use
- Staff tools to help detect potential use of GenAI software

The image shows the cover of a guidance document. At the top left is the University of Liverpool crest and name. At the top right is the logo for the Centre for Innovation in Education, with the tagline 'Support | Engage | Innovate'. The main title is 'University Guidance on the use of Generative Artificial Intelligence by students and staff, in learning, teaching, and assessment'. Below the title is a box indicating 'Academic Year 2023/2024'. At the bottom, it lists the authors: Dr Ceri Coulby, Dr Sam Saunders & Dr Claire Ellison | Date: February 2024, Revised 2024, by Prof David Webster, Gordon Sandison, Rob Lindsay, Dr Sam Saunders, Dr Claire Ellison & Richard McKenna. The background is dark blue with a white geometric pattern at the bottom right.

UNIVERSITY OF LIVERPOOL

Centre for Innovation in Education
Support | Engage | Innovate

University Guidance on the use of
Generative Artificial Intelligence by students and staff, in learning, teaching, and assessment

Academic Year 2023/2024

Authors:
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Revised 2024, by Prof David Webster, Gordon Sandison,
Rob Lindsay, Dr Sam Saunders, Dr Claire Ellison &
Richard McKenna



Popular/Accessible Voices

WEEKLY SERMON

communicate@blackburn.anglican.org



Is AI a threat to mankind's inherent creativity?

If you follow the news in any way at all you can't fail to have noticed all the stories in recent weeks about the rise of AI (artificial intelligence).

It's nothing new of course, at least in science fiction ... remember HAL 9000, the creepy sentient computer in '2001: A Space Odyssey'?

That's the fiction ... but down the years since then computer experts have been experimenting and refining until now, with the likes of 'ChatGPT' (an artificial intelligence chatbot) we have the dawn of a new age. An age where computers really can substitute human creativity with some considerable success.

Launched in November 2022, it's already clear ChatGPT presents many opportunities, but it is also being perceived as a threat by many, including educational establishments.

No wonder, when it can produce a passable (pardon the pun) essay that reads as 'new' not plagiarised.

That's because it uses its immense power to drag facts and figures from across the internet and re-expresses them in a fresh way; not just regurgitating passages of someone else's essay.

Then there are a number of AI art generators that can produce artwork based on a particular style that looks like the real thing. Don't believe me? Then check out [this recent article in The Guardian](#) where they asked art experts to tell the real painting from the AI fake. Several times they got it wrong!

It's a concern. What does it mean for our human creativity if a computer can produce better essays and more engaging artwork than you or I? Personally I would take a poorly drawn real artwork over some AI perfection any day.

So it concerns me that in the Guardian experiment, when presented with the fact he had chosen incorrectly, expert Bendor Grosvenor responded 'if you offered me the choice, I would actually go for the AI one'.

Really? The AI one?

Are we now actively preferring AI creativity to that of humanity in all its rich diversity? I hope not.

It may not feel like it to many, but we are at a pivotal moment in the history of mankind.

God made us all in His image. We are the pinnacle of His creation. In the Bible, in Ephesians 2, v10 it says: 'For we are God's handiwork, created in Christ Jesus to do good works, which God prepared in advance for us to do.'

All of us have gifts from God to express ourselves. Some people sing - it may be for karaoke in the local pub or it could be for the King at the Coronation Concert in a few weeks. Both entertain in their own ways.

HEALTHY CHURCHES TRANSFORMING COMMUNITIES

Some people are craftsmen and women; others write; still more paint beautiful artworks or excel at sport or music. The list is endless. As humans we are filled 'with understanding, with knowledge and with all kinds of skills'. (Exodus 35 v31)

I'm not a Luddite and I will use these AI tools but that's all they are - tools to help us; and that's all they should ever be. Even tech giants like Elon Musk are [calling for caution](#) in how we move forward.

My prayer for our world right now is that with everything else going on right now, from the cost of living crisis to Ukraine, we don't take our eye off the AI ball.

In the famous verse in Jeremiah (29 v11) we hear God saying: "For I know the plans I have for you," declares the LORD, "plans to prosper you and not to harm you, plans to give you hope and a future."

But we have also been given free will by God, so we must all guard our collective futures carefully. Let's pray those who continue to develop these technologies do so wisely, while the people who use them don't abuse the undoubted opportunities AI presents, to the detriment of the creativity inherent in all of humanity.

Ronnie Semley, Communications Manager

ChatGPT – dawn of new age; large language models; pivotal moment

Substituting human creativity with some success

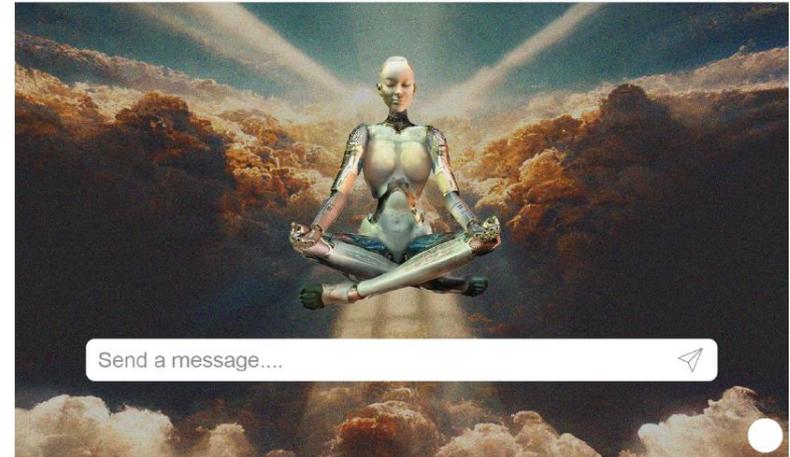
Use of AI tools – but that's all that they are – tools to help us; notes of caution, even from the original developers

Our free will – pray to continue the developments wisely; use does not abuse undoubted opportunities AI presents, to detriment of creativity inherent in all of humanity

HEALTHY CHURCHES TRANSFORMING COMMUNITIES

The Guardian

- Rabbi Joshua Franklin
- Input into ChatGPT - “Write a sermon in the voice of a rabbi of about 1000 words that relates the Torah portion Vayigash to intimacy and vulnerability. Cite Brown’s scholarship on vulnerability”
- Was delivered to Jewish congregants
- Passable with suitable content – congregation thought it was written by some other famous rabbis
- But...lacked exactly what was preached – human vulnerability and emotion.
- Rabbi Franklin “If I’m going to preach about vulnerability and intimacy...I would share something of myself for vulnerability. And that’s something that artificial intelligence and ChatGPT cannot do”
- MCK – fabrication....own experience



Artificial intelligence (AI)

Are chatbots changing the face of religion? Three faith leaders on grappling with AI

Mainstream adoption of generative AI and conversational bots has left few spaces untouched, even religious communities



Johana Bhuiyan

Fri 7 Apr 2023 11.00 BST

BBC



Royal Institution Christmas Lectures

2023: Professor Mike Wooldridge - The Truth about AI: 2. My AI Life

Professor Mike Wooldridge reveals the huge role AI already plays in our daily lives, sometimes without us even realising what it is doing. [More](#)

59 mins 26 Dec 2023 Available for 11 months

Added Download

Audio Described Sign Language



2023: Professor Mike Wooldridge - The Truth about AI: 3. The...

Professor Mike Wooldridge is joined by leading experts to grapple with the future of AI.

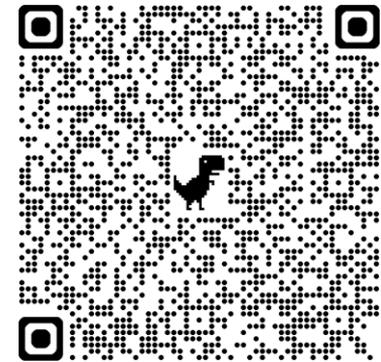


2023: Professor Mike Wooldridge - The Truth about AI: 2. My...



2023: Professor Mike Wooldridge - The Truth about AI: 1. How...

Professor Mike Wooldridge explores the nature of artificial intelligence.



Faraday Institute and AI Christian Partnership

AI and humanity: Navigating history's next great wave



Faraday Paper: The Future of Artificial Intelligence and Human Identity by Ros Picard



PRINT SHARE

Artificial Intelligence

Home > Churches > Hot Topics > Artificial Intelligence

Even if you are the greatest technophobe, it's worth recognising that everyone, everywhere is affected by Artificial Intelligence (AI). Whether going shopping or on a phone helpline, paying for parking or receiving healthcare, AI is already having an impact on your life and will increasingly do so in the coming years. Some of these technologies are extremely helpful. You might be grateful that a chatbot can save me waiting half an hour to ask a simple question about my phone bill. On the other hand, you might find it concerning that facial recognition software is used to track people's whereabouts in some countries. This is a topic we need to think about in our churches!

While Christian thinking on technology in general is fairly well developed, we haven't had that long to think about AI specifically. As with most new technologies, the Bible has nothing to say about AI specifically, but much to say in general about how we use it. Some people are more cautious than others about the potential of AI to contribute to society, while others are more optimistic. No doubt Christian thinking on this subject will develop rapidly, and a resource like this will be very different in five or ten years time.

There are now many Christian resources available on AI, so these are provided as a starting point for your own exploration of the subject.

This work is being done in collaboration with the [AI Christian Partnership](#), which exists to bring together Christian organisations, theologians and technologists to help the Church respond to the opportunities and challenges of AI.

[AI Christian Partnership](#)

Members

The AI Christian Partnership members include the Christian think tank *Theos*, the *Faraday Institute for Science and Religion*, *Youthscape* - training youth leaders across Britain, *ECLAS* - Equipping Christian Leaders in an Age of Science, the *Industrial Christian Fellowship* - supporting Christians in the world of work, and the *European Evangelical Alliance*.

[Find out more about us](#)

Welcome to the AI Christian Partnership

Enabling Christians to navigate the world of AI

[About us](#) [Our projects](#) [Our blog](#) [Resources](#) [Stay in touch](#)



Congregational Voices

Ribchester, Hurst Green and Mitton





Artificial Intelligence and Faith: What do you think?

Thanks very much for getting this far and showing an interest in completing this short survey within our United Benefice of Ribchester with Stydd, Hurst Green and Mitton...and beyond!

It should only take a few minutes to complete.

All answers will be completely anonymised and no personal data will be obtained, retrieved or stored in any way. Your answers will help further our understanding together of Artificial Intelligence and its impact in our faith community. Results will be shared in due course and in our discussion groups.

For the (optional) longer answer questions (6 - 10), please feel free to write as much or as little as you would like.

Many thanks for your help!

The Revd Canon Dr Mike Kirby;

Ribchester Resident;
Canon Scientist, Liverpool Cathedral;
Senior Lecturer (Radiotherapy Physics), Liverpool University;
Honorary Lecturer (Cancer Sciences), Manchester University

MS Forms electronic version; and paper based one

3. Please state your age *

- 16 - 20
- 21 - 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 +
- Prefer not to say

4. Please state your highest qualification *

- GCSE or equivalent
- A level or equivalent
- Bachelors Degree or equivalent
- Masters Degree or equivalent
- Doctorate
- None of the above

* Required

1. Please state your gender *

- Woman
- Man
- Non-binary
- Prefer not to say
- Prefer to self-describe

2. If you prefer to self-describe your gender, please enter it below

Enter your answer

5. Please examine each of the short statements below and ask yourself if you Agree Strongly, Agree, Disagree, Disagree Strongly or are Not Certain about it. You can optionally reflect more upon each one in questions 6-10 *

	Agree Strongly	Agree	Not Certain	Disag
I feel I have a thorough knowledge of Artificial Intelligence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that Artificial Intelligence poses a big THREAT to Society	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that Artificial Intelligence could bring great BENEFITS to Society	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that Artificial Intelligence could greatly COMPLEMENT my Faith in some way	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that Artificial Intelligence brings large CHALLENGES to my Faith in some way	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

And space for (optional) qualitative answers

6. In a few words or sentences, tell us what is your present understanding of Artificial Intelligence?

(This Question is Optional)

Enter your answer

7. From what you have read and heard, how do you feel Artificial Intelligence could be a THREAT to Society?

(This Question is Optional)

Enter your answer

8. From what you have read and heard, how do you feel Artificial Intelligence could be a BENEFIT to Society?

(This Question is Optional)

Enter your answer

9. How do you feel Artificial Intelligence could be a COMPLEMENT to our Faith?

(This Question is Optional)

Enter your answer

10. How do you feel Artificial Intelligence could be a CHALLENGE to our Faith?

(This Question is Optional)

Enter your answer

11. Would you like to have further discussions or information about Artificial Intelligence within our United Benefice? *

- Yes
- No
- Maybe
- I live outside the Benefice

12. Are there any other points you'd like to add? *

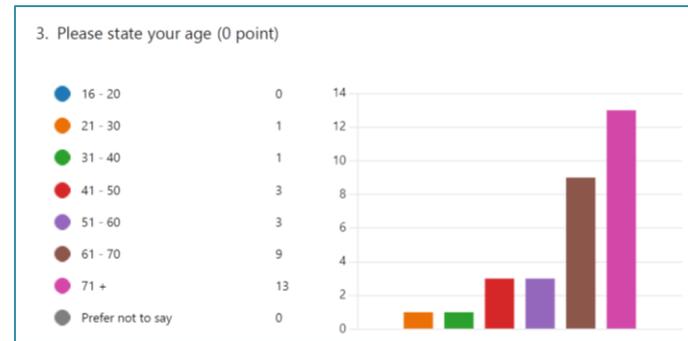
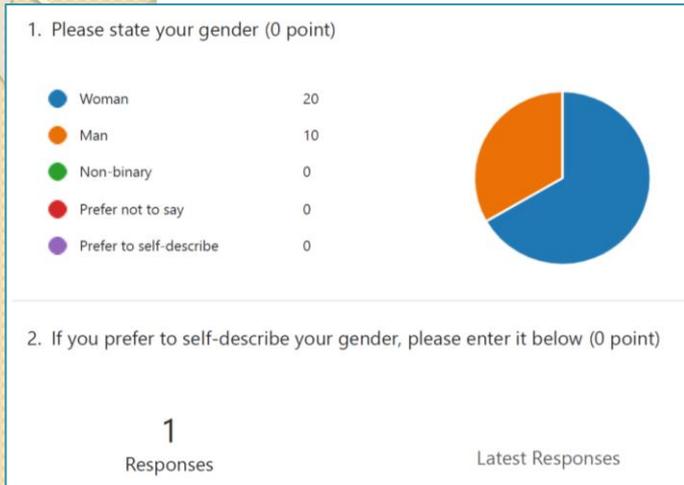
Enter your answer

13. Many thanks for taking part! Please feel free to rate this short survey! *

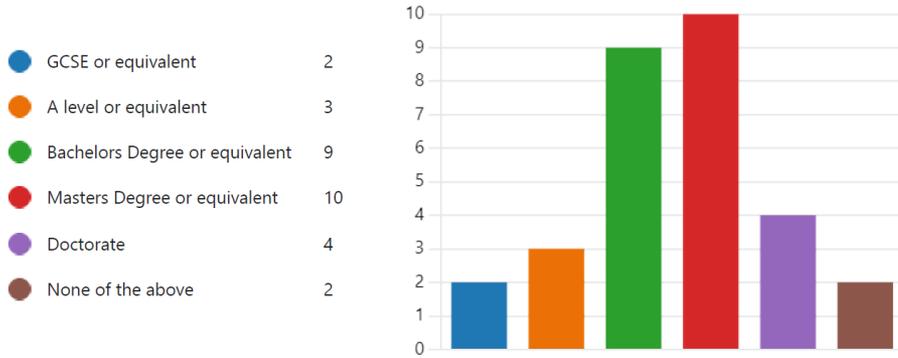


Submit

Results – combined (12 electronic + 18 paper copies; 30 in total)

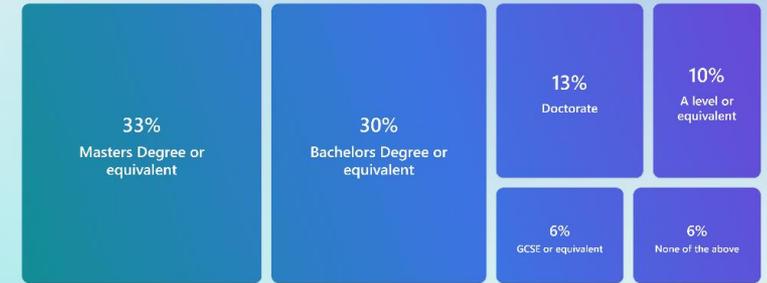


4. Please state your highest qualification (0 point)



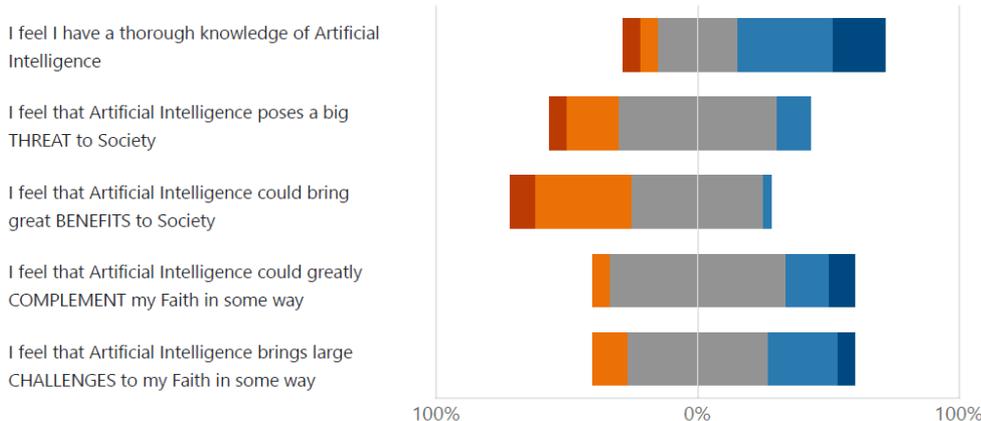
30 responses submitted

Please state your highest qualification



5. Please examine each of the short statements below and ask yourself if you Agree Strongly, Agree, Disagree, Disagree Strongly or are Not Certain about it. (0 point)
You can optionally reflect more upon each one in questions 6-10

■ Agree Strongly
 ■ Agree
 ■ Not Certain
 ■ Disagree
 ■ Disagree Strongly



	AS/A	NC	D/DS
I feel I have a thorough knowledge of Artificial Intelligence	13.4%	30%	56.6%
I feel that Artificial Intelligence poses a big THREAT to Society	26.6%	60%	13.4%
I feel that Artificial Intelligence could bring great BENEFITS to Society	46.7%	50%	3.3%
I feel that Artificial Intelligence could greatly COMPLEMENT my Faith in some way	6.6%	66.7%	26.7%
I feel that Artificial Intelligence brings large CHALLENGES to my Faith in some way	13.4%	53.3%	33.3%

6. In a few words or sentences, tell us what is your present understanding of Artificial Intelligence? (optional) (21/30 (70%) answered)

- The ability of computers/machines to perform tasks that would previously require human input; and to continuously learn from mistakes or information that is input or searched (W, 21-30)
- I think that AI is a system where machines are 'taught' by repeated input of data. Machine Learning? (W, 61-70)
- Statistical exploration of data to extract knowledge which can then be applied to other purposes (M, 71+)
- A more elaborate version Google that presents us with knowledge based on rationalising and logical analysis that is useful in a technological environment that ignores emotional, embodied knowledge and Faith (M, 71+)
- I understand it already exists and many of us use a variation of it in our everyday lives. I can see the benefits it may bring but worry about negative aspects and speed of development (W, 61-70)
- Very limited understanding so far but I do feel that it currently appears to determine outcomes; i.e. health (predictions). It can take control (W, 71+)

7. From what you have read and heard, how do you feel Artificial Intelligence could be a **THREAT to Society?** (optional) (20/30 (67%) answered)

- Potential to take away sense of values and humanity. Not all actions/interactions can or should be reduced to non sentient algorithms. Danger of manipulation by individuals, groups, governments intent on forcible control of others (W, 61-70)
- The potential for AI to learn and develop faster than what we anticipate, and potentially breach codes that are initially put in place. Data breaches etc. Potentially replacing certain (not all) jobs that currently require human input (W, 21-30)
- I think a lot of this is linked to films showing a dystopian future after general AI is born (which I think is along way off). Personally, I don't think its a threat in the way films show (computers taking over the world etc.) I think it will change our lives immeasurably and I hope and think that it will be for the better (M, 31-40)
- If AI knowledge was taken as the whole truth in any situation it would stifle enquiry, reduce knowledge to facts and stigmatise other forms of knowledge as useless. Add it to an enforcement agency and we would have "Big Brother" (M, 71+)
- I dont think it could be any more a threat than other media, for instance works of fiction and philosophy. Its up to individuals to take what they need from all these things (W, 71+)
- By making decisions that are wrong. By lulling humans into a false sense of complacency (M, 61-70)

8. From what you have read and heard, how do you feel **Artificial Intelligence could be a BENEFIT to Society?** (optional) (20/30 (67%) answered)

- Streamlining services, improving efficiency and ease for people to access support (W, 21-30)
- Rapid analysis and interpretation of big data to answer questions previously thought impossible ... may bring big advancements in areas such as personalised medicine (W, 51-60)
- In medicine. Interpretation of test results. Modeling of molecules in drug development. To better understand and mitigate risk in banking (M, 71+)
- AI has the potential to greatly enhance productivity, help solve questions, provide care and support and much, much more (M, 41-50)
- Helping those with special needs or the elderly. Those in under-developed economies (W, 61-70)

9. How do you feel Artificial Intelligence could be a **COMPLEMENT** to our Faith

(optional) (18/30 (60%) answered; 7/30 (23%) >v little/dk)

- Not sure how it could complement faith???? Where is the “soul” in AI? (W, 61-70)
- I have always believed that knowledge is God given. It's human nature and desire for power which corrupts..... (sorry, not sure where my thoughts are going with this!)

Another thought is that AI might give us a clearer interpretation of the Gospels?

AI might be a way of the Gospels reaching more people and communities (W, 61-70)

- Not possible since Faith is about relationships between humanity and God so how can AI complement it? (M, 71+)
- I do not see the two as mutually exclusive so a person can find benefits from both (M, 41-50)
- My faith is personal and I hope Ai could not invade that! (W, 71+)

10. How do you feel **Artificial Intelligence** could be a **CHALLENGE** to our Faith

(optional)(15/30 (50%) answered; 11/30 (37%) >v little/dk)

- Again unsure about this as knowledge limited. Would be interested to know more about how study of AI is being pursued within faith community (W, 61-70)
- Will we rely too heavily on computer power and algorithm-generated results (based on humans- and therefore ultimately error-prone), and forget about God's omnipotence and omniscience, and therefore forget to seek His face? (W, 51-60)
- If it became accepted that AI is the totality of all knowledge (M, 71+)
- Loss of human interaction perhaps (W, 61-70)

12. Are there any other points you'd like to add? (8/30 (27%) answered beyond 'No/nothing to add/blank')

- If our faith is to be seen as relevant to everyday life and is to impact on the society in which we live (as it should be), then we must address a topic which will have increasing influence in how we (and those who follow on from us) live our lives. For many of us actively involved in the beneficent AI may seem remote - are we burying our heads in the sand? Do we/should we be more concerned? How much does popular media create debate and concern which is counterproductive? Is there something we are missing which could enhance our faith? (W, 61-70)
- Yesterday I had a completely frustrating 'computer says no' type of day. It was impossible to talk to anyone to ask for help. I was at screaming point and had achieved absolutely nothing despite my best efforts. This experience which is not infrequent makes me very wary of AI (W, 61-70)
- I was not aware, but accept I may be wrong, that AI was able to grasp the concepts of moral codes and spiritual beliefs (M, 61-70)
- Can a machine show honour to God? (W, 61-70)

The Voice of AI itself!

- Google BARD (Feb 2024)

How would AI answer the question?! *Artificial Intelligence and Faith: what do you think?*

As a large language model, I am not capable of forming personal opinions or beliefs, including those related to faith. However, I can share some different perspectives on how AI might impact faith and provide information to help you form your own opinion.

Potential benefits:

Enhancing understanding: AI could analyze vast amounts of religious texts and data, potentially offering new insights into religious history, practices, and interpretations.

Personalized experiences: AI-powered tools could personalize religious practices, tailoring prayers, meditations, or educational materials to individual needs and preferences.

Accessibility and outreach: AI-powered translation tools and virtual reality simulations could make religious experiences more accessible to people with disabilities or those geographically isolated.

Community building: AI-powered platforms could connect people with similar religious beliefs, fostering community and support networks.

Potential challenges:

Replacing human connection: Overreliance on AI for spiritual guidance or community could diminish the importance of human interaction and relationships.

Bias and discrimination: AI algorithms can reflect the biases of their creators, potentially perpetuating discrimination within religious communities.

Commodification of faith: AI-powered religious experiences could become commercialized, losing their deeper spiritual significance.

Misinterpretation of religious texts: AI analysis of religious texts might not capture the nuances and context important for deeper understanding.

Ultimately, the impact of AI on faith will depend on how it is developed and used. It is crucial for individuals and religious communities to engage critically with AI, ensuring it aligns with their values and enhances rather than diminishes their faith practices.

It's important to remember that these are just a few potential impacts, and the true relationship between AI and faith is likely to be much more complex and nuanced. I encourage you to explore this topic further and form your own informed opinion.

Google BARD

Conclusions and futures...

- **Opportunity and Challenge**
 - Professionally
 - In what could be achieved clinically; still many challenges – scientific and ethical; however, in my view, directive is love to our patients; gifts and fruits of spirit
 - Academically
 - More to intelligence than rules of computer programmes; authentic, experienced faith voice; challenges of bias, especially for some people; self-automation; religion exceeds texts and practices....not amenable to reductive replication; acceptable and unacceptable use – original thought; shallow, depth of understanding, sources of information
 - Popular/Accessible
 - AI tools; free will to use with wisdom (and not abuse); many trusted sources of further information; BBC, Faraday, AI Christian Partnership
 - Congregational
 - Fascinating to hear views, understanding and insights on AI and relationship to faith; thoughts on benefits and challenges; need to do more of this
 - AI itself
 - Good starting points – lays out benefits and challenges; measured in response; information source is the internet
 - Like many challenges within our world, one to keep in our thoughts and prayers – that God's love and wisdom runs through the heart of AI and how it might be developed and used



Many thanks for your attention;
God bless and stay safe....

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Obrigado!

