J. Nathan MATIAS

J. Nathan Matias is an Assistant Professor in the Department of Communication at Cornell University. We spoke with him about introducing Christian perspectives on AI's role in society to Christian audiences, bridging between scientific and faith-specific content, and working within existing knowledge-sharing networks. All photos courtesy J. N. Matias.

Your public engagement project discusses a Christian perspective on artificial intelligence. What shape does this take?

A few years ago, I collaborated with researchers at Oxford, Harvard, and Arizona State University to produce a series of discussion guides called Artificial Intelligence in Christian Thought and Practice. Although people have been thinking about faith and artificial intelligence for decades now, we produced one of the more recent accessible introductions to this topic for Christian audiences, to help discuss key issues in the role of artificial intelligence in society.

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In the discussion guides, we pulled out seven issues that we felt not only are incredibly relevant to people today, but that also link to long-standing conversations within Christianity about who we are and who we can be in this world. We looked at global understanding and cooperation. We talked through issues of sin, justice, and religious freedom. We investigated counseling and spiritual care, as well as issues related to how we allocate resources and how we relate to artificial persons. We did our best to take the latest advances, understandings, and broader academic conversations, and frame them in a way that was understandable—to bridge to ways of thinking and seeing the world that Christians draw from the Christian tradition.

The perspective we started with is that AI is becoming a basic part of our everyday lives, often in ways that we can't even see. And so the first product for this is just in how people see that it's there. And then of course we want to help people bridge between what they're experiencing and the traditions and understanding that they already have—to make sense of these emerging questions in ways that are still grounded in the engineering and science of what's possible, and what's real. Because of course, AI has a lot of hype.

We published this series of guides for a few different audiences. We knew that there would be a set of intellectuals and pastors and theologians who were starting to think about AI and wanting to anchor their ideas in the state of the field, but we also knew that people in churches and their everyday lives might also have questions. We created the guides, under a Creative Commons license, so that they could be split up into one-page introductions, with discussion questions. So, if a student group or a local church wanted to discuss these topics, they'd be able to do that even if they didn't have someone in the conversation who was an AI expert.

How does this work relate to your broader research interests?

Much of my research asks how the public can be involved in understanding and shaping the role of technology in our lives and world. I often do that through a citizen science approach. We are in a time when corporations have more power than ever to shape what we see and who we talk to, and to collect data about us. The research that I do organizes communities of sometimes thousands, sometimes tens of millions of people to independently collect data and analyze not only the effects of technologies in our social world, but also what we can do to create change.

In a democracy, the public has an essential role to play. Many of the issues we wonder about are areas where the everyday decisions each of us make have a huge impact. In that work, it's important to both speak to what we might think of as the general public, and also do the translation work to make it more possible for people to bring their knowledge, their traditions, and their standpoints to those conversations—especially people of faith.

You've made these guides available to anyone. How have they been used, and what kinds of effects have you seen?

There are a number of outcomes. First, both journalists and religious leaders have turned to our guide when they ask, "Where do I even start with this conversation?" We've also had some wonderful opportunities to bring these guides into church communities; over the last year, I participated in several Sunday school churches I hadn't even met before they reached out to me. I would give a short talk, and then the Sunday school would break out and have conversations, and it was always very fascinating. And then also, we're starting to see a range of Christian communities organize technologists to think creatively, not only about their

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craft, but also about the ethics of what they do from a faith perspective, and these guides have sometimes been used in those contexts as well.

This guide has also opened conversations with Christian organizations. Especially larger Christian organizations; if you think about aid organizations or justice-oriented organizations, or even large ministries, their engineering teams, their analysts, are facing questions about what kind of AI systems should they use, if at all, and what should be the guardrails for their use of those systems? And they're especially keen to find ways of thinking about the pros, the cons, the ethics of the systems they're considering, in ways that are connected to some of the deepest values that they hold. There have been numerous cases already where we've received inquiries from Christian organizations that are trying to think about their use of AI in light of the Christian faith.

Writing these guides opened up the opportunity to advise the Vatican on its first hackathon last year. And similarly, I was able to distribute this material at events and to gatherings of Christian technologists that brought together tens of thousands of people over the last few years. Even if only a fraction of people engage with the material, we've definitely had people making use of this material on at least three continents—in Europe, in the United States, and in Latin America.

And in general, colleagues have been really interested and intrigued, and really curious to find out how Christian communities are making sense of the research they've done in this area.

What kind of response did you expect when you started out?

We set our goals fairly narrowly. There were certain sets of communities that were interested in this. We thought, "Let's create it and also make it more widely available, and then see where it goes." Because it's a Creative Commons resource, we encourage people to download it, translate it, and reshare

it. We didn't give ourselves specific goals for influence or impact, so we're pleasantly surprised every time we hear from someone who says, "Hey, we downloaded this and used it in our church community," or "Hey, can we translate this and make it available in this new context?" Those are pleasant outcomes.

The field of AI, in general, is not one that has succeeded at being very inclusive in terms of gender or race or global inclusion. And that's something that we tried to remedy in our report, and it's also something that I know a lot of, particularly American, Christian communities also wrestle with. So, one thing that I've been glad this guide could do is to help represent an inclusive range of scholars and forward opportunities and connections, a broader range than I think you typically see in AI.

We probably couldn't have predicted in 2017 that three years later, multiple towns and cities in the United States would ban or consider banning facial recognition. We knew this was going to be an important set of topics, but it certainly exceeded our expectations in public demand for conversations on these issues.

Have there been any outcomes that you didn't expect?

One of the most interesting outcomes for me has been conversations with people from non-Christian faith communities. I've had conversations with rabbis, and with religious leaders in Islam. It's been really fascinating for me to learn from how they've read what we produced. They've been able to see how we bridged the scientific knowledge with the faith-specific content, and have talked about how they might do it within their traditions.

I had a chance to speak at the Harvard Divinity School to a very wide-ranging group of religious leaders and humanists, and for me, that was one of the most interesting conversations. I certainly didn't expect that writing something for Christians would give me a chance to

learn from and hear from people outside of Christianity, but it was really great to see that come about.

What advice would you give a scientist interested in doing something similar?

I feel like I still have questions about doing this kind of work myself. There are a few things that I feel especially strongly about, and maybe some lessons.

The first is that not every area of science is as controversial as climate or origins or things that you often hear about in the news when people are talking about science and religion. And there are a great number of topics like this one, where we don't even know what the controversies are yet. Contributing at an early stage and helping big communities have the language to engage with these topics, and helping scientists see how that works can be an incredibly rewarding and valuable experience.

Beyond that, there are a few other things. Working with a diverse team of scholars has made a big difference, because having people in different countries with different understandings about technologies playing out in the world has been essential for us to write something that isn't necessarily just American-centric. And it has been used by people around the world as a result, which has been a great thing to see.

Two more things. One is that by creating a Creative Commons resource, we were able to create something that could spread in a way that didn't require as much friction or effort from us. We're all busy scholars, and had we done more to try to control the materials, it would have taken up much more of our time. Instead, we keep on getting notes from people saying, "Oh, we found your resource and we used it for this thing." Certainly, if we had an authorship team, we wouldn't have been able to anticipate that.

Finally, this project involved much more than just creating something and putting on the Internet, right? We created it because there was one community that knew they wanted to have this conversation. And, while this isn't our main area of work for any of us, we each continue to do a small amount of work to continue the conversation in bringing these materials in front of Christian communities that are looking for these conversations. Circulating our resources can percolate across networks, because Christianity is so full of gatekeepers and networks that circulate knowledge behind the scenes. I think any project would benefit from thinking about what those networks are, and how the material you're creating will be dovetailed with how those networks operate and the kinds of knowledge that they find the most useful. The practical embodiment of that in our project is that we knew that for discussion groups in churches or other Christian gatherings, we needed to have a short-form format that could be printed out in large numbers. And we needed to be able to frame it using scriptural texts, using the kind of language and format that people are used to in a gathering with other Christians. ∿

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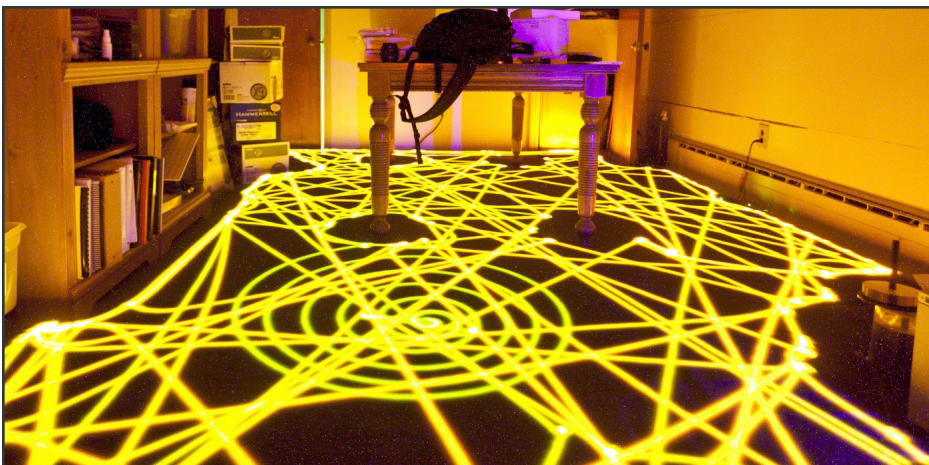
Time-lapse image of a floor-cleaning robot. This image is used in Nathan's discussion guide, "Artificial Intelligence in Christian Thought and Practice." Image CC-BY-SA 2.0 by Terry Robinson.

For more DoSER resources, including more about Dr. Matias, please visit:

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