

Endnotes

How do you think AI will change your job or research field in the future?

If all we know is to pursue research productivity, or practical solutions and products that come from research, then yes, AI will do this better than us very soon. But if we also keep in mind why we do science in the first place, then AI can actually allow us to have more time for the uniquely human pursuit of knowledge, wisdom, and the pleasure of finding things out.

–Jing Liu (PhD '98)
ANN ARBOR, MI



AI is having minimal effect on my job right now as a software architect and engineer in the health care field. There is a lot of hype around how AI will “replace” all software developers, but I am not seeing that actually occur, and my experience is that today’s AI code generators and similar tools “look good” but create more problems than they solve. Even when it works well (which is rare), the end result decreases one’s understanding. This is a dangerous, not helpful, end result.

–David Lee (EX '85)
JASPER, IN



“AI is already influencing mathematical research and the study of complex systems in several ways, and I expect that influence to grow. In network science, machine learning is enhancing our ability to analyze and model large-scale networks, uncovering patterns that would be difficult to detect with traditional methods.”

–Mason Porter (BS '98)
LOS ANGELES, CA

As someone who does research in computational and systems biology, AI is an important tool for me but one with significant limitations. It is easy to get fooled into thinking you have a highly predictive AI model only to see it fail as you alter the parameters of the input data or the system you are studying. AI requires the intuition and insight that one hones over the course of a career to create new insights.

–John Quackenbush (BS '83)
DOVER, MA

This is the (unnuanced) first paragraph of ChatGPT’s response to my prompt “How would Mason A. Porter answer the question ‘How do you think AI will change your job or research field in the future?’”:

As a public high school teacher, I see teachers using AI to create classroom materials that would otherwise take an inordinate amount of time, such as a multimedia presentation on a history topic. I’m expecting a push to use AI to replace “live” teachers. I worry that an AI-based teacher may not be able to create a useful teacher–student connection.

–Matt Carlson (BS '92, PhD '00)
WEST LAFAYETTE, IN

I am 86—
thank heaven
I will not have
to deal with it!

–Don Owings (BS '59)
GREENVILLE, SC

AI will further help me fuse my passion for arts with multilevel analysis of potential life habitability and health of planetary systems.

–Christopher Boxe (PhD '05)
ARLINGTON, VA



As an
orthopaedic
surgeon,
I find that
the personal
contact with the patient

and compassionate caring experiences might suffer from too much reliance upon statistical data encouraged by AI. Telemedicine is a middle ground of great value, and I see AI as more helpful there.

–Robert Thompson (BS '60)
HOMER, AK



Currently, we are using AI large-language models to extract and organize large amounts of geologic and fossil information for public databases coupled to visualization and statistical routines — essentially, putting a century of experts’ careful work at the fingers (or keyboards) of modern geoscientists and the public, so they can explore Earth’s history. We’d never have tried such an ambitious project without the assistance of AI and advanced software.

–James Ogg (BS '75, MS '75)
WEST LAFAYETTE, IN

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