



S.E.T. for socio-economic growth

National Science and Technology Forum (NSTF)

discussion forum

NSTF Panel Session: Pitfalls of Artificial Intelligence (AI)

15 September 2023

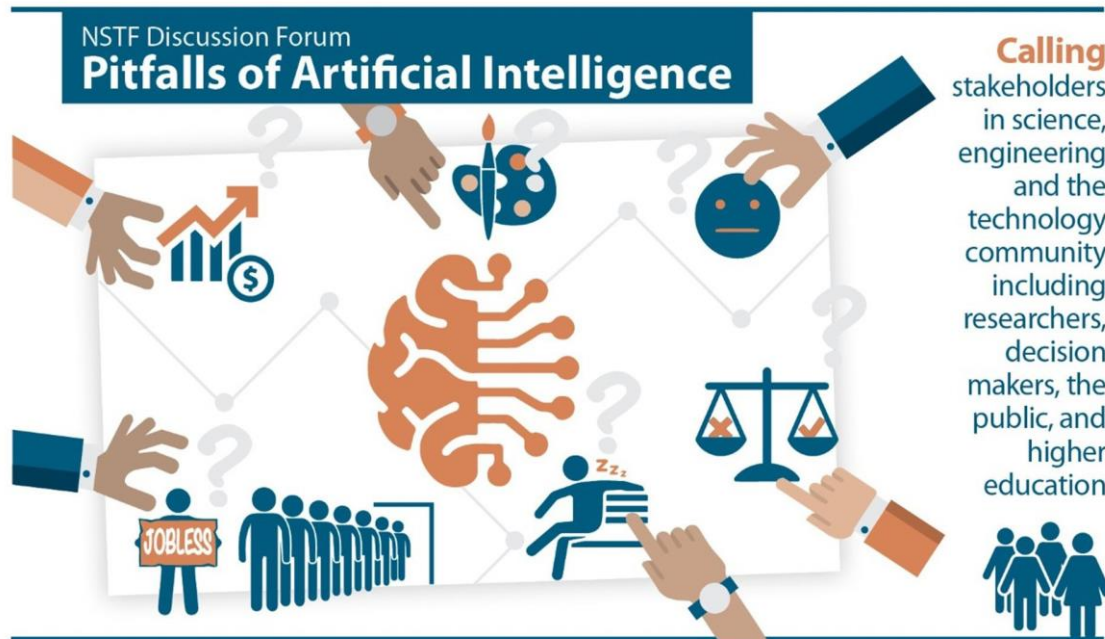
16:00 PM - 18:00 PM (Central African Time (CAT) including SA)

10:00 AM - 12:00 PM (EDT)

The [National Science and Technology Forum \(NSTF\)](http://www.nstf.org.za) is hosting an online panel session on the side lines of the [Science Summit at the 78th United Nations \(UN\) General Assembly](https://www.un.org/en/conferencesandsummits/science-summit-at-the-78th-unga) on 15 September 2023. This NSTF Panel Session will host four expert speakers on the topic of '[Pitfalls of AI](#)'. It is a follow-up on a two-day NSTF Discussion Forum held in May 2023.

The theme of the conference is the UN Sustainable Development Goals (SDGs) but there will be much discussion on digital technologies in relation to the SDGs. The SDGs that relate to the AI topic are:

- SDG 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- SDG 10: Reduce inequality within and among countries
- SDG 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels



NSTF Discussion Forum
Pitfalls of Artificial Intelligence

Calling stakeholders in science, engineering and the technology community including researchers, decision makers, the public, and higher education

Join the online conversation and make your voice heard.

Click [here](#) to register.

Background: The NSTF hosted an online discussion forum in collaboration with [proSET \(Professionals in science, engineering and technology\)](#), the professional societies sector of the NSTF, on '[Pitfalls of Artificial Intelligence \(AI\)](#)' on 18-19 May 2023. This is a follow up discussion on that event.

Pitfalls of AI: AI is becoming indispensable as users of various AI technologies become aware of the advantages of using it. AI can perform frequent, high volume and automated tasks without fatigue, can process big data, and gives out accurate predictions in shorter time frames than humans are capable of. This reduces human errors and provides actionable information quicker than manual processes. The predictive ability of Large Language Models (LLM) has become phenomenal, making it possible for AI to learn human language and conventions with increasing accuracy and give satisfactory responses to human queries. However, the shortcomings of chatbots like ChatGPT which are based on LLMs are becoming evident – their performance is based on what they find on the internet and everything in the outputs is fabricated, as the AI's purpose is to combine what is available on the internet in a plausible form.

It is concerning that there are no firmly universally established ethical codes or standards yet, and the adaptation of legislation to protect users and society from AI's 'mistakes' is proceeding much too slowly. There is a limited number of (highly skilled) people who can program the machines, and few people are required to operate them, thus creating insufficient employment in any economy. There is also the long-held fear that robots may someday render humans useless and/or dominate them. The emergence and public release of chatbots based on LLMs have brought this specter closer to reality.

This panel session aims to touch on these debates in society and follow up on the two-day NSTF Discussion Forum held in May 2023.

Objectives:

- To unpack the possible impact of the latest developments in AI.

- To deliberate on the challenges faced by society and humanity as a result of these developments.
- To gather recommendations for best practice and measures to prevent the harmful use of AI technologies.

Themes:

- The challenges AI technologies pose to society and humanity
- What skills are important in the context of these new developments?
- Issues of legislation and leadership

Outcomes: We aim to answer the question: ***How do we prevent AI technologies from taking away human agency, and mitigate the possible harmful impact of these technologies?***

We aim to formulate recommendations flowing from the discussion forum in May 2023 and this panel discussion at the UNGA78 Science Summit:

- On how to promote the responsible use of AI technologies
- On responsible education and skills training in the context of AI
- On legislation, regulations and codes of conduct relating to the use of AI
- On the implications for leadership in business, research and society

Outputs

As is done with all [NSTF Discussion Forums](#), the following outputs will be made available on the NSTF event page and through NSTF social media platforms ([Facebook](#), [Instagram](#), [Twitter](#), [YouTube](#) and [LinkedIn](#)):

- Recording of the panel session
- Presentation slides (if available and subject to the speakers' agreement)
- Speakers' biographies document
- Useful links (Feel free to let us know should you have any information that you would like us to consider posting here)
- NSTF will engage the media on possible interviews and/or articles, and post on social media before, during and after the event

Delegate registration information

Date: 15 September 2023

Time: 16:00 - 18:00 (CAT and South Africa); 10:00 – 12:00 (EDT)

Programme: Click [here](#) to see the programme for the session

Biographies: Click [here](#) for the speakers' biographies

Register (online event): Click [here](#) to **register**. You will receive an email to confirm your registration, and you will be directed to a page to also register for the Science Summit.

Continuous Professional Development (CPD) points: CPD points will be awarded to South African attendees who are registered with [SACNASP](#) (South African Council for Natural Scientific Professions), as well as ECSA (Engineering Council of South Africa), in collaboration with the [Institute of Professional Engineering Technologists](#) (IPET). For other affiliations, please contact the NSTF office at enquiries@nstf.org.za.

*Attendance and participation is FREE to all those interested.
Please note that if you do not register, the NSTF cannot be held responsible for any unforeseen changes or cancellations of programmes. Communications are sent only via e-mail or through notifications on the NSTF website.*

About the NSTF: The NSTF is a non-profit [stakeholder forum](#) representing the SET and innovation community in South Africa. The [membership](#) consists of more than 120 organisations, and ranges from research institutions, universities and state entities to business, [professional societies \(proSET\)](#) and civil society. The NSTF promotes collaboration and critical thinking among a broad range of stakeholders. [NSTF Discussion Forums](#) gather stakeholders together, across the public and private sectors, to exchange knowledge and ideas, and give feedback to government and relevant authorities.

About the NSTF

The [National Science and Technology Forum](#) (NSTF), established in 1995:

- is a broadly-representative [stakeholder body](#) for all science, engineering and technology (SET) and innovation organisations in South Africa
- gathers stakeholders around [burning issues of national and global interest](#), across the public and private sectors, including matters of public policy
- includes a [network of professional societies in SET and STEM education](#) (STEM = science, technology, engineering and mathematics) - the [NSTF proSET membership sector](#).
- recognises, awards and profiles the outstanding contributions of individuals and groups to SET and innovation through the prestigious [NSTF Awards](#)
- runs and supports collaborative projects and [youth outreach](#), including recognition of top performance in mathematics and science, role modelling, bursary and STEM career information
- runs and supports the [STEMulator.org](#) which attracts youth and educators to Explore>Discover>Learn the world of STEM including careers. (Established by NSTF proSET)

For more information

www.nstf.org.za

E-mail: enquiries@nstf.org.za

Disclaimer

The NSTF has taken all practical measures to ensure that the material contained in this newsletter is correct.

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