

# Editorial: More Covid

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## Introduction

*South African Computer Journal* has not passed through the Covid-19 pandemic unscathed. Fortunately, at time of writing, none of our editors has contracted the virus. However, we have all lost time to unaccustomed activities like online courses. Another problem many academics have had is large numbers of plagiarism cases, arising from having to switch fast to online learning with inadequate time to prepare.

These problems pale into insignificance compared with the massive socioeconomic destruction around the world.

Despite all this, we are able to publish a second issue to schedule in December.

In this issue, most of the papers are extended papers from the inaugural Artificial Intelligence research conference, Forum on AI Research (FAIR), held in Cape Town, South Africa over 3–6 December 2019.

I therefore defer the main part of editorialising on content of the issue to the guest editors, Deshendran Moodley and Marelle Davel.

## Covid in perspective

On the positive side, technology has aided with academic activities and meetings; webinars have become a commonplace occurrence and some of the lessons learnt will stand in good stead in a future world where the requirements of avoiding climate change will lead to less travel.

South Africa's National Arts Festival was held completely online in 2020. While live performances are far better, the technology used could open up such events to much wider participation.

I have spent a lot of time on social media, sometimes the dark side of technology, countering disinformation. While scientists often make mistakes, there is a method to science. A fact is established if enough people with the right competence agree on it after eliminating other

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possibilities. The scientific method encompasses basics like reproducibility. While this can go badly wrong (Allison et al., 2016), at least there is a method to it and scientists check on each other.

Twitter science is more like: “If enough people as ignorant as me agree, it becomes a fact.”

We are in a world where everyone is an epidemiologist – so no one is an epidemiologist. A comprehensive model of disease spread is complex; it must take into account societal variation, variation in susceptibility and variation in disease onset, among other things. It bemuses me to see so many speak authoritatively about SEIR (susceptible, exposed, infectious, recovered) models (He et al., 2020), for example, without betraying the slightest understanding of how these models work.

A problem that often pops up in public discourse about science policy is the extreme certainty of those who lack the conceptual framework to understand a problem; this is called the Dunning–Kruger Effect (Dunning, 2011). It becomes very difficult to argue science policy against such opposition as the less the knowledge, the greater the certainty. Add to that the social media echo chamber effect and unfounded conspiracies become firmer fact than carefully-thought-through science.

Unfortunately, the real experts are too busy to debate these issues in public; those of us who understand enough to do science communication have a responsibility to fill the gap as what should be science-driven policy increasingly becomes politicised.

## In this issue

In this issue, we have three regular research papers, in addition to the FAIR special issue:

- Kotzé and Wolff: “Exchanging image processing and OCR components in a Setswana digitisation pipeline”
- Khomokhoana and Nel: “Decoding the underlying cognitive processes and related support strategies utilised by expert instructors during source code comprehension”
- Stapelberg and Malan: “A survey of benchmarking frameworks for reinforcement learning”

We also have one Viewpoint:

- Gruner: “Invited Lecture: Notions of ‘Theory’ and their Practical Consequences in the Discipline of Software ‘Engineering’ (including Information Systems Design)”

## Future

Overleaf was used at least partially to write all but one of the papers in this issue. While we do not subscribe to value-added features like direct submission to the journal, we are so far finding it to be a useful alternative to standalone  $\text{\LaTeX}$  typesetting.

Authors who use Microsoft Word will be less tempted to go this route but an online collaborative writing platform becomes even more important with travel and contact restrictions.

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