

# Editorial: Research beyond our borders

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## Contributions from Namibia and Ukraine

This first issue of SACJ in 2023 includes three papers from researchers outside South Africa: one from our neighbours in Namibia and two from Ukraine. The first paper from Namibia by [Shapopi, Limbo and Backes](#) describes the operation and running of Namibia's first high performance computer, how this experience has developed human capacity, and how the service is supporting scientific research. The paper is published in the form of a 'Communication', rather than a research paper. Communications in SACJ are publications of ideas or experiences that are deemed by the editor-in-chief to be of interest to readers. Although contributions of this category are not peer reviewed and hence would not qualify for government subsidy in the South African context, they still follow the usual copy-editing and production editing processes and are allocated a unique persistent DOI like regular research papers.

Similar to Communications, Viewpoints are publications of research-in-progress that are not peer reviewed. In this issue, we have two articles published as Viewpoints from the [Glushkov Institute of Cybernetics of the National Academy of Sciences of Ukraine](#). Since Russia's invasion of Ukraine in 2022, the work of Ukrainian researchers has become very challenging due to the large-scale decrease in funding for research projects. In addition, many researchers were mobilised into the ranks of the armed forces and those who are keeping research going in cities such as Kyiv have to contend with the unpredictability and destruction of ongoing rocket attacks. We are therefore happy to support these researchers in a small way by disseminating their work. [Figure 1](#) provides a glimpse into the research lab in Kyiv of the authors who contributed to this issue.

Both articles from Ukraine are related to ontologies. The first paper by [Malakhov, Petrenko and Cohn](#) describes the architectural and structural organisation of an ontology-related system for processing repositories of scientific publications. The second paper by [Litvin, Palagin, Kaverinsky and Malakhov](#) describes an approach for the automated creation of ontologies from natural language text and provides a software implementation parameterised for the Ukrainian language. We hope these articles will be of interest to researchers in South Africa

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Figure 1: Kyrylo Malakhov being interviewed by local media about the work of their research team with the Kyiv territorial defence squad (*photo courtesy of Kyrylo Malakhov*).

that are active in the field of knowledge representation and reasoning, such as those associated with [CAIR \(Centre for Artificial Intelligence Research\)](#).

## Other contributions in this issue

Other than the Communication and Viewpoints, this issue also consists of an obituary and eight reviewed research papers. The obituary, written by Estelle Trengove from Wits, [celebrates the life of Prof Barry Dwolatzky](#). His passing is a great loss to many in our community, but he will be fondly remembered for his passion for software engineering and for the many positive initiatives that he instituted to develop the South African ICT sector.

The first reviewed research paper in this issue is by [de Coning, Hoffman, and Mouton](#) titled “*Traffic control centre optimisation on South African freight corridors through intelligent weigh-in-motion*”. The study is concerned with efficient detection of overloaded freight trucks on our highways. Currently, too many trucks are incorrectly flagged as overloaded (based on weigh-in-motion estimates) and are diverted to static weighing stations, resulting in unnecessary and costly delays. The authors propose a solution that includes data sharing between control centres and AI-based classification, and show that this approach would result in a significant reduction in unnecessary diversions to static scales.

The rest of this issue consists of papers for the special issue on *Digital education and online learning to achieve inclusivity and instructional equity* with guest editors Reuben Dlamini and Reikai Zenda. The first part of this special issue was published in the December issue of 2022 and in this issue, we include the remaining papers, which are discussed in detail in the [Guest Editorial](#).

## New URL and platform

We are pleased to announce that SACJ has a new URL (<https://www.sacj.org.za/>), which for the mean time has been set up to point to the current site (<http://sacj.cs.uct.ac.za>) hosted by UCT’s Department of Computer Science. During the second half of 2023, we will be moving

SACJ to a new platform hosted by the Academy of Science of South Africa (ASSAf), as part of Khulisa Journals (<https://journals.assaf.org.za/>). The advantage of moving to the Khulisa Journals Platform is that they will take care of the maintenance and updating of the OJS software and we can also benefit from their expertise in terms of best practice for open access journal management.