

Press release

Embargoed until 13:30 CET on 17 January 2024

AI in the fight against global inequality

World's most powerful supercomputers support UN SDGs and global sustainability

Zurich, 17 January 2024

The Federal Department of Foreign Affairs (FDFA) and ETH Zurich, in collaboration with their partners, are launching the International Computation and AI Network (ICAIN) at the World Economic Forum (WEF) 2024 in Davos. Its mission is to develop AI technologies that benefit society as a whole, as well as being accessible to all and sustainable, thereby helping to reduce global inequality.

Artificial intelligence (AI) is one of the most critical technologies of our time. It is set to radically transform our society, economy and politics, and also has the potential to combat global challenges such as climate change, pandemics and income inequality. Many countries are therefore trying to expand their AI capabilities and invest in the necessary infrastructure. But many potential players, especially in the Southern Hemisphere, have no access to the relevant technologies due to the high cost and shortage of key components.

Global challenges need global solutions

The founders of the International Computation and AI Network want to open up access to supercomputing, data and software infrastructures, as well as AI know-how, to a wider community. The aim is to facilitate international research projects that benefit society as a whole and promote the United Nations Sustainability Development Goals (SDGs). "The capabilities for developing generative AI models are currently mostly in the hands of private companies," says Alexandre Fasel, state secretary at the Federal Department of Foreign Affairs (FDFA). "This creates the risk that solutions will be developed primarily that can be monetised quickly and not be affordable for players in low-income countries." Furthermore, these capacities are concentrated in just a few regions of the world, so that the cultural or linguistic features of disadvantaged groups are mostly ignored in the training of AI models. ICAIN therefore adopts a bottom-up approach, where researchers submit project applications and only use the resources they otherwise cannot access.

One example of the implementation of an initial pilot project is the collaboration between ICAIN and Data Science Africa (DSA). This pan-African organisation networks data scientists across the entire continent, offers training programmes and supports non-profit research projects in the area of machine learning and data sciences. One of the aims of the first joint project is to use artificial intelligence to make agriculture more resilient to the negative effects of climate change.

Press release

The outcomes of the projects supported by ICAIN will be made publicly available and must be transparent as regards both AI models and training data. “For us, the cooperation with ICAIN is interesting because it opens up new opportunities for our members in the implementation of AI projects within the African context. We also want to share the unique expertise of DSA members for the benefit of others within the network,” says Professor Ciira Maina, Board Chair of Data Science Africa.

First projects starting in 2024 – ICAIN set-up to be completed by 2025

The founding members of ICAIN not only include the FDFA and ETH Zurich and EPFL but also the Swiss National Computing Centre (CSCS), the European Laboratory for Learning and Intelligent Systems (ELLIS), Data Science Africa and the Finnish IT Center for Science (CSC), which is the hosting member of the LUMI consortium. “I am delighted that we have been able to place ICAIN on a broad, international foundation from the outset, which - in addition to the necessary expertise - can also provide two of the most modern and powerful supercomputers with our own Alps infrastructure and the European LUMI,” says Christian Wolfrum, Vice President for Research at ETH Zurich. “Obviously we also hope to convince other partners of the importance of ICAIN’s mission and encourage them to actively support us.” Potential candidates might include, for example, research institutes, international organisations, companies or foundations willing to support ICAIN financially with contributions in kind (such as computing power) or specialist expertise.

During the incubation phase in the current year, the governance rules and coordination processes for ICAIN will be drafted and financing secured. In addition, the first pilot projects (in conjunction with DSA, for example) will kick off with the aim of gathering experience in collaboration with project partners. ICAIN’s organisational structures should all be in place by 2025.

Contact

Markus Gross, ETH Zurich, Media Relations,
Phone: +41 44 632 41 41, mediarelations@hk.ethz.ch