

Boom in Artificial Intelligence patents, points to 'quantum leap' in tech: UN report

The “upsurge” in patent applications for devices and machines powered by Artificial Intelligence (AI) in the last five years, suggests that it could soon revolutionize all areas of daily life far beyond the tech world, a UN [report](#) suggested on Thursday.

According to the World Intellectual Property Organization (WIPO) Technology Trends report, 50 per cent of all patents for AI – the replication of human intelligence by machines for use in industries such as transport and healthcare, for instance – have been published since 2013, adding up to more than 170,000 different patented ideas.

This followed on from an initial boom in AI scientific publications, which began in 2001.

WIPO Director General Francis Gurry told journalists in Geneva the surge in patenting was “striking”, noting that AI research began in the 1950s. “But there has been a quantum leap since about 2013, so we’re dealing with what is happening right now in a very fast-moving field,” he insisted.

‘Machine learning’ is the dominant AI application

By number, patent applications for machine learning, indicate that this is currently the dominant application of AI; think of apps that include ride-sharing services to minimize detours.

The fastest-growing AI area is “deep learning”, however, which is used in speech recognition.

This saw a 175-per cent annual increase in patent applications from 2013 to 2016, far in excess of the 33 per cent average for all patents in the same period.

US and China dominate so far

The United States and China dominate the field of patent application, although only a fraction of China’s patents is filed abroad. US-based tech giant IBM leads by number of patent applications (8,290), followed by Microsoft (5,930).

Japan’s Toshiba has the next highest patent tally (5,223), ahead of South Korea’s Samsung (5,102) and Japan’s NEC Group (4,406).

China’s increasingly important role in the sector is also illustrated by the fact that Chinese organizations make up 17 of the top 20 academic players in

AI patenting, as well as 10 of the top 20 in AI-related scientific publications.

'Major' military, economic uses for AI

In coming years, AI is set to grow with "major military and economic" uses, Mr Gurry suggested, before highlighting the importance of proposed WIPO-led discussions between Member States, on legal and ethical issues relating to intellectual property rights that have been raised by the technology.

"One would expect that the strategic focus of major geopolitical players will turn to their positioning in relation to AI," he said.

Internet search giants have also been key to the AI revolution, the WIPO report shows, with Google (US) and Baidu (China) embracing the potential of the technology early on, just as Microsoft and Apple did before them.

"You did say that we see some of the internet giants there," Mr Gurry said to reporters. "Why? Because of data...because of the access they have to data."

In addition to the US and China's large populations, the WIPO head noted the importance of State-led support for innovation in both places, which included investing in technology hubs and even training specialized patent officers.

Biggest AI opportunities lie outside software industry

Faced with this backing, "it's very difficult for other countries, even those with great education, to compete with the business, engineering and investing talent" of China and the US, AI expert and CEO of Landing AI and deeplearning.ai, Andrew Ng, notes in the WIPO publication, adding that the "biggest untapped opportunities" lie outside the software industry, in areas including agriculture, healthcare and manufacturing.

European diversity 'an obstacle to machine learning'

Echoing those comments, the WIPO Director General noted that the cultural and linguistic diversity of Europe "is not necessarily favouring the formation of major data pools. And we all know the more data, the better for machine learning for example, the results, you are going to get".

Asked whether the world was better off because of the technology, which industry experts credit with the potential to create massive economic value, the WIPO Director General underlined the fact that the science behind it is "neutral".

"Is it (AI) good news or bad news?" he asked. "Well, I would tend to say that all technology is somewhat neutral, and it depends on what you do with it. So, insofar as you may use AI science and techniques for developing autonomous weapons systems that are going to kill us all, is not very good news, but insofar as it's being used to improve health indicators for diagnostics, for other purposes, it's great news."

[Palestinian children's education deeply impacted by 'interference' around West Bank schools, UN warns](#)

Alarmed by a high number of reported incidents of interference in or near Palestinian schools in the West Bank since the beginning of the school year in September, the UN called on Wednesday for them to be better-protected from the effects of Israeli occupation.

"Classrooms should be a sanctuary from conflict, where children can learn and develop into active citizens", said Jamie McGoldrick, UN [Humanitarian Coordinator](#) for the region in the joint statement with [UNICEF](#) Special Representative, Genevieve Boutin, and UN educational, scientific and cultural body [UNESCO](#).

Highlighting the impact of the incidents on safe access to education, the statement noted "threats of demolition, clashes on the way to school between students and security forces, teachers stopped at checkpoints, and violent actions of Israeli forces and settlers on some occasions".

In 2018 alone, the UN documented 111 different cases of interference to education in the West Bank affecting more than 19,000 children.

"Children should never be the target of violence and must not be exposed to any form of violence", said the two senior UN officials in the region, appealing for a safe learning environment and the right to quality education for thousands of Palestinian children.

Settlement activity 'clear rebuff' to two-State solution says UN rights expert

The [Special Rapporteur for human rights in the occupied Palestinian territory](#) also issued [a statement](#) on Wednesday, calling on the international community to "take decisive action in response to Israel's recent intensification of settlement activities in the occupied West Bank, including East Jerusalem, which amounts to a clear rebuff of a two-State solution".

"If the settlements steps by Israel are left unanswered by the international community, we will be driving past the last exit on the road to annexation", Michael Lynk added, stressing that the settlements "are the source of a range of persistent human rights violations".

He said the last year has seen "a marked rise in incidents of violence by Israeli settlers against Palestinians in the West Bank" whereby "in many cases, Israeli forces, obligated to protect the Palestinian population under

international humanitarian law, stand idly by while olive trees are destroyed, livelihoods are damaged, and even while people are injured or, at worst, killed.”

He said the events in the West Bank village of Al Mughayyir on 26 January were a “sobering example of this extremely troubling phenomenon, where a Palestinian villager was shot dead in the presence of Israeli settlers and soldiers. These incidents not only violate numerous human rights such as the rights to life, security of the person, and freedom of movement of Palestinians, but also serve to expand the area of land over which Israeli settlers have control,” Mr. Lynk stated.

[‘Open, cordial, and frank discussions’ held over future Somalia-UN relationship](#)

Discussions described in a joint statement as “open, cordial and frank”, took place on Wednesday, between Somalia’s top two politicians and the UN [political and peacebuilding affairs](#) chief, in the capital Mogadishu.

President Mohamed Abdullahi Mohamed and Prime Minister Hassan Ali Khaire, welcomed top UN official [Rosemary DiCarlo](#) for talks, some four weeks after the Federal Government of Somalia (FGS) took the decision to expel the UN’s most senior representative in the country, Nicholas Haysom, declaring him persona non grata.

The Government accused the veteran South African official and former lawyer for Nelson Mandela, of interfering in the “internal affairs” of Somalia, exceeding his mandate as UN Special Envoy to the country, after he criticized Government treatment of a former Al-Shabaab leader, who was running for state-wide office.

UN chief [Antonio Guterres](#) said he deeply regretted Somalia’s decision, expressing his “full confidence” in the Special Envoy, a stance which was backed by the UN Security Council.

In a joint statement from the Government and UN Mission in the country, [UNSO](#), the top Somali leaders and Ms. DiCarlo committed to “strengthen the relationship” between the UN and the Government, and the three “discussed practical measures for the FGS and the United Nations to work more closely together for the benefit of all Somali people and to support Somalia’s state building and peacebuilding priorities.”

Under-Secretary-General DiCarlo also held “a constructive dialogue with FGS

Ministers and discussed how to enhance coordination between FGS ministries and the United Nations”, commending the FGS’ comprehensive reform agenda and expressed the strong support of the United Nations for implementation of the milestones set out in the FGS’ roadmaps on Inclusive Politics, Security and Justice, Economic Recovery, and Social Development.”

The Prime Minister underscored the Government’s “high regard for the work of the United Nations of which Somalia is a proud member, and emphasised Somalia’s commitment to its international obligations and membership.” He also emphasized the UN’s “critical role in Somalia and thanked the organisation for its contribution to Somalia’s path from conflict to stability and growth.”

The President and Prime Minister also “reiterated their commitment to enhance the security and safety of UN personnel”, adding that they were looking forward to “deepening their long partnership” with the UN, “to enable Somalia to continue to make progress towards a peaceful and prosperous future.”

[Security Council unanimously agrees to extend UN Cyprus Mission amid political impasse](#)

The United Nations Peacekeeping Force in Cyprus ([UNFICYP](#)) has been extended for 6 months, as a result of a Security Council Resolution unanimously adopted on Wednesday. The move comes at a time when reunification talks between the two divided halves of the island are at an impasse, following the collapse of talks in July 2017.

Resolution 2453 reaffirms the UN’s position on Cyprus, urging all sides to renew their commitment to the creation of a federal state and stressing that the current status quo is unsustainable. However, no fresh talks between the Greek-Cypriot and Turkish-Cypriot authorities have so far been scheduled.

The latest [report](#) of the Secretary-General on the UN operation in Cyprus notes that the two communities want a peace process that is “more inclusive, transparent and representative of the people,” and that uncertainty surrounding the future of settlement negotiations seems to be hampering political engagement, and risks eroding support for reunification in the country. Recent polls show that there are still high levels of mutual distrust, despite growing levels of confidence between both sides on the Mediterranean island. in recent years.

The main positive development mentioned in the report is the opening of two new border crossings, which are separated by a buffer zone maintained by

UNFICYP. One of the crossings, at Deryneia/Derinya, has opened up the greater Famagusta region – a densely populated area with a long history of grass-roots support for intercommunal contact and cooperation. The situation alongside the ceasefire lines remains stable, but the opposing forces on either side remain heavily armed, and the tension between them, whilst at a low level, remains “ever-present.”

The resolution urges the implementation of confidence-building measures, such as the development of an island-wide electricity and mobile phone network, and calls on leaders on both sides to promote peace education, and improve the atmosphere for settlement negotiations through constructive and harmonised messages.

[UN relief chief urges Security Council to back aid delivery, more funding for millions of Syrians hit by harsh weather](#)

“Millions are living under tents or tarpaulins or in damaged buildings with no power or heating. There are severe shortages of all the basics – from blankets to baby milk to bandages,” [Mark Lowcock](#) told the Security Council, adding that the harsh weather is destroying the makeshift shelters and forcing tens of thousands more people to move.

He said that since late last year, the UN and its partners had been raising funds to support vulnerable Syrians with vital winter items, including plastic sheeting to reinforce shelters, stoves and heating fuel, as well as blankets, jackets and winter clothes.

“We have raised \$81 million so far, which has allowed us to help 1.2 million people. Continued support is critical to ensuring that all those in need can be reached,” he said.

Turning to war-battered Idlib, he said weather has been difficult for the people there, where the risk of military escalation continues to loom. Over the second half of last year he had frequently highlighted the growing concerns of the UN [Office for the Coordination of Humanitarian Affairs](#) (OCHA), which he heads up, about the plight of three million people in Idlib and neighboring areas in north-west Syria, from which civilians simply have nowhere else to flee, should there be a full-scale military incursion into the area.

While a September agreement between Russia and Turkey was followed by a significant decrease in ground fighting and airstrikes, January saw an

increase in fighting between non-State armed groups, placing civilians at risk and resulting in injury and death.

“Today I reiterate the importance of sustaining the Russia-Turkey agreement and I remind you that a large-scale military operation in Idlib would have catastrophic humanitarian implications,” he said of the deal brokered by the two countries to create a demilitarized buffer zone in Idlib.



UN Photo/Manuel Elias

Mark Lowcock, Under-Secretary-General for Humanitarian Affairs and Emergency Relief Coordinator, briefs the Security Council on Syria (file).

Further, Mr. Lowcock recalled that last month, the Council extended the authorization for the cross-border relief operation into Idlib. As hundreds of thousands of people are reached each month with lifesaving assistance through our cross-border operations, he said: “We must continue to be able to provide food, medicine, tents, critical winter supplies and other help.”

Meanwhile, he said some 42,000 people remain stranded in Rukban along the Syria-Jordan border. Conditions in the informal settlement have continued to deteriorate since the last humanitarian convoy to the area, from 3 to 8 November. Eight infants reportedly died there since last month.

“Again, the cold is making the situation even worse. So, it is critical that the parties support a second convoy to Rukban, said Mr. Lowcock, explaining that the UN has been engaged on multiple fronts to ensure that can happen, including by addressing concerns expressed by Russia and the Syrian Government about the security of the convoy and monitoring arrangements for aid distribution.

“On 27 January, we received verbal approval from the Ministry of Foreign Affairs in Damascus for the convoy to proceed. Security guarantees have also been received from the Russian Federation and from International Coalition

Forces,” he told Council members, and planning was now underway for loading of the trucks to begin before the end of the week, and for them to set off by 5 February.

“We call on all parties to ensure that this goes ahead without any further delay,” he stated.

UN relief chief’s specific asks on Syria for the Security Council

- First, support from all Member States to ensure that the parties respect and protect civilians, with particular attention to the north-west and north-east of the country.
- Second, the humanitarian convoy to Rukban must be allowed to proceed as planned.
- Third, for all parties to facilitate safe, regular and sustained humanitarian access, so we can carry out additional needs assessments, deliver to all areas where needs are most severe and monitor the impact of our interventions.
- And fourth, financing for the immediate life-saving needs in Syria, to help people through the bitter winter, but also to ensure the humanitarian programmes in OCHA’s 2019 [Humanitarian Response Plan](#) are well-funded. [A conference in Brussels](#) on 13-14 March will be a critical marker in this regard.