Altruistic AI
Example Areas of Interest

2020-03-26

INNOV8TIVE MINDS

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Areas of Interest

Environmental

Patient-Centred
Service Delivery

Sustainable
Agriculture

Indigenous
Communities

Impoverished
Regions

AI Ethics
& Fairness

Youth

Accelerated
Learning

Arts &
Culture

Environmental

How artificial intelligence can tackle climate change

Climate change is the biggest challenge facing the planet. It will need every solution possible, including technology like artificial intelligence (AI). Seeing a chance to help the cause, some of the biggest names in AI and machine learning—a discipline within the field—recently published a paper called "Tackling Climate Change with Machine Learning." The paper, which was discussed at a workshop during a major AI conference in June, was a "call to arms" to bring researchers together, said David Rolnick, a University of Pennsylvania postdoctoral fellow and one of the authors.

2019-07-18   https://www.nationalgeographic.com/environment/2019/07/artificial-intelligence-climate-change/

How Rainforest Connection is saving the rainforest through old phones, solar panels and AI

Topher White founded the nonprofit Rainforest Connection with the intent of creating a low-cost monitor that could help remote communities in their efforts to halt illegal logging, which is an enormous threat to tropical habitats. As it turns out, the best way to track people who are cutting down trees is sound. Using old cell phones linked to an artificial-intelligence platform in the cloud, White developed a system that can detect chainsaws in real time and send automated alerts to authorities.

2020-02-19   https://www.outsideonline.com/2409501/artificial-intelligence-hears-rainforest

How AI is helping elephants, orcas and 3 more species

Elephants used to wander freely across Asia. Today, they roam through a fraction of the land they used to. As the human population grows, Asian elephant habitat continues to shrink. In addition to dwindling habitat, the African elephant contends with an illegal ivory trade that kills more than 20,000 elephants a year. Conservationists and researchers are doing all they can. That's where programs like AI for Earth come in. More than 300 grants have been given to projects in 60 countries. That's good news for elephants — and other animals, too. See how researchers, conservationists and scientists are using Microsoft's cloud and AI tools to understand diverse species and safeguard vulnerable animals.

2019-06-04   https://news.microsoft.com/on-the-issues/2019/06/04/ai-helping-animals/

Patient-Centred Service Delivery

The potential for artificial intelligence in healthcare

The complexity and rise of data in healthcare means that artificial intelligence (AI) will increasingly be applied within the field. Several types of AI are already being employed by payers and providers of care, and life sciences companies. The key categories of applications involve diagnosis and treatment recommendations, patient engagement and adherence, and administrative activities. Although there are many instances in which AI can perform healthcare tasks as well or better than humans, implementation factors will prevent large-scale automation of healthcare professional jobs for a considerable period. Ethical issues in the application of AI to healthcare are also discussed.

June 2019   https://www.rcpjournals.org/content/futurehosp/6/2/94

SURGICAL ROBOTS, NEW MEDICINES AND BETTER CARE: 32 EXAMPLES OF AI IN HEALTHCARE

Example: Olive's AI platform is designed to automate the healthcare industry' most repetitive tasks, freeing up administrators to work on higher-level ones. The platform automates everything from eligibility checks to un-adjudicated claims and data migrations so staffers can focus on providing better patient service.
Example: PathAI is developing machine learning technology to assist pathologists in making more accurate diagnoses. The company's current goals include reducing error in cancer diagnosis and developing methods for individualized medical treatment.

2019-07-04   https://builtin.com/artificial-intelligence/artificial-intelligence-healthcare

DOZEE: AN AI-POWERED BEDSHEET FROM IIT GRADS CAN PREDICT HEALTH OUTCOMES

A group of IIT graduates has built up an AI fueled sensor sheet by the name of Dozee that can be put under the bed to identify health indicators, for example, heart condition, breath, sleep and stress parameters with high accuracy like in a hospital setting. The gadget takes a shot at an innovation known as Ballistocardiography (BCG), which includes the measurement of the heart muscle movement. The BCG technology can be stretched out to track sleep movements concerning breathing, body movement, coughing, snoring, etc.

2019-09-25   https://analyticsindiamag.com/dozee-a-bed-sheet-from-iit-grads-can-precisely-predict-health-outcomes-using-ai/

Sustainable Agriculture

New AI app predicts climate change stress for farmers in Africa

A new artificial intelligence (AI) tool available for free in a smartphone app can predict near-term crop productivity for farmers in Africa and may help them protect their staple crops—such as maize, cassava and beans—in the face of climate warming. The team will unveil the new tool—which will work with their existing AI assistant, called "PlantVillage Nuru".

2019-09-19   https://phys.org/news/2019-09-ai-app-climate-stress-farmers.html

The Nature Conservancy Fisheries Monitoring

Nearly half of the world depends on seafood for their main source of protein. In the Western and Central Pacific, where 60% of the world's tuna is caught, illegal, unreported, and unregulated fishing practices are threatening marine ecosystems, global seafood supplies and local livelihoods. The Nature Conservancy is working with local, regional and global partners to preserve this fishery for the future.

2017   https://www.kaggle.com/c/the-nature-conservancy-fisheries-monitoring

7 Shocking Ways AI Is Shaping the Food Growing Industry

Artificial intelligence is a subject that has been shrouded in mystery for years. Although robots are not going to take over any time soon, artificial intelligence is certainly making its mark in many industries. Over the last twenty years, the agricultural industry has seen many changes. You would be surprised to learn how AI is changing the way foods are grown, allowing for a more consistent product without as much human intervention needed.

2019-07-19   https://agron.io/blogs/news/7-shocking-ways-ai-is-shaping-the-food-growing-industry

Indigenous Communities

AI + Indigenous Knowledge a powerful tool posing critical questions

In Kakadu National Park, an invasive weed is choking precious wetlands. Para grass is displacing native plants and reducing habitats for magpie geese, a population considered to be a key indicator of 'healthy country' by traditional owners. It's hard for local park rangers to monitor and manage this weed in this vast landscape – and with limited resources. However, the introduction of an Artificial Intelligence (AI) tool paired with Indigenous Knowledge is improving adaptive management, and in one wetland, the magpie geese population has increased from 50 to 1800 birds.

2019-11-27   https://algorithm.data61.csiro.au/ai-indigenous-knowledge-a-powerful-tool-posing-critical-questions/

How AI is breathing new life into te reo Māori with chatbot

"Kia ora!" – Whether you're Māori or not using this greeting says so much about New Zealand and how proud we are of our unique culture. Although, it hasn't always been this way. It's only in recent years that we've really started to take steps to make sure it remains a part of everyday life. Once I knew what was possible in the world of AI I had the idea for Reobot. It's a Facebook Messenger chatbot you can text in te reo anytime, anywhere. Just like a real conversation, you simply start with kia ora (or hello) and go from there.

2019-09-11   https://www.ibm.com/blogs/ibm-anz/ai-and-te-reo-maori/

Indigenous AI

The Indigenous Protocol and Artificial Intelligence (A.I.) Working Group develops new conceptual and practical approaches to building the next generation of A.I. systems. The working group is interested the following questions: From an Indigenous perspective, what should our relationship with A.I. be? How can Indigenous epistemologies and ontologies contribute to the global conversation regarding society and A.I.? How do we broaden discussions regarding the role of technology in society beyond the largely culturally homogeneous research labs and Silicon Valley startup culture? How do we imagine a future with A.I. that contributes to the flourishing of all humans and non-humans?

2020   http://www.indigenous-ai.net/

Impoverished Regions

AI For Humanity: Using AI To Make A Positive Impact In Developing Countries

Artificial intelligence (AI) has seeped into the daily lives of people in the developed world. From virtual assistants to recommendation engines, AI is in the news, our homes and offices. There is a lot of untapped potential in terms of AI usage, especially in humanitarian areas. The impact could have a multiplier effect in developing countries, where resources are limited. By leveraging the power of AI, businesses, nongovernmental organizations (NGOs) and governments can solve life-threatening problems and improve the livelihood of local communities in the developing world.

2019-08-23   https://www.forbes.com/sites/forbestechcouncil/2018/08/23/ai-for-humanity-using-ai-to-make-a-positive-impact-in-developing-countries-2/#7a83f7951b08

Will AI kill developing world growth?

Artificial intelligence (AI) could displace millions of jobs in the future, damaging growth in developing regions such as Africa, says Ian Goldin, professor of globalisation and development at Oxford University. I have spent my career in international development, and in recent years have established a research group at Oxford University looking at the impact of disruptive technologies on developing economies. Perhaps the most important question we have looked at is whether AI will pose a threat - or provide new opportunities - for developing regions such as Africa.

2019-04-18   https://www.bbc.com/news/business-47852589

Dymaxion Labs: Surveying large areas using AI-powered geospatial analytics to help better inform public policies and decision makers

In Latin America and the Carribean, countries face stark disparities in children's health between neighboring countries; and chronic undernutrition greatly impedes the livelihoods of children and their future outcomes. In order to secure the livelihoods of every child, it is imperative to generate up-to-date data to measure the impact of public policies related to food security and household conditions. Tracking the growth of cities and informal settlements complements this data to give a big picture. Using our analytics platform, companies, governments, and NGOs can access up-to-date, ready to use data to make better decisions that impact their populations.

2019-06-14   https://www.unicef.org/innovation/stories/unicef-innovation-fund-graduate-dymaxion-labs

AI Ethics & Fairness

Biased Algorithms, Sexism in AI & Need For Diversity

The Rising 2019, held on this International Women's Day was one of the largest gatherings of women in the field of analytics, data science and AI. The conference hosted a diverse set of speakers who shared their professional experiences and talked about their growth story and challenges faced as women.

2019-03-11   https://analyticsindiamag.com/biased-algorithm-sexism-ai-need-for-diversity-were-the-3-big-takeaways-from-rising-2019/

Using artificial intelligence to detect discrimination

A new artificial intelligence (AI) tool for detecting unfair discrimination—such as on the basis of race or gender—has been created by researchers at Penn State and Columbia University. Preventing unfair treatment of individuals on the basis of race, gender or ethnicity, for example, been a long-standing concern of civilized societies. However, detecting such discrimination resulting from decisions, whether by human decision makers or automated AI systems, can be extremely challenging.

2019-07-10   https://phys.org/news/2019-07-artificial-intelligence-discrimination.html

These Startups Are Building Tools to Keep an Eye on AI

The software can help developers constrain their creations so they don't make bad decisions - Researchers describe some machine learning systems as "black boxes," because even their creators can't always describe exactly how they work, or why they made a particular decision … [developers] don't claim to have fully solved that problem, but offer tools that make it easier to observe, visualize, and audit machine learning software's behavior.

2019-10-21   https://www.wired.com/story/these-startups-are-building-tools-keep-eye-ai/

What is AI4YOUTH Canada?

AI4Youth Canada is a non-profit student run organization based in Calgary, Alberta. It was founded by Claire Du and Gerry Lu in June 2018. Led by their strong passion for AI, Claire and Gerry ran a peer student survey about AI awareness, then founded Western Canada High School AI Club earlier, which was the first ever high school AI club in Canada. After seeing both the very limited AI learning resources, especially the experiential learning resources that accessible to high school students and the thirsty pressing demands from students, Claire and Gerry motivated to make efforts to change and founded AI4YOUTH CANADA, they hope to combine forces to create opportunities for their peers and see more Canadian youth become leaders, innovators and game changers in AI integrated future.

2019   https://www.ai4youthcanada.com/

Machine Learning for Kids

Machine learning is all around us. We all use machine learning systems every day - such as spam filters, recommendation engines, language translation services, chatbots and digital assistants, search engines, and fraud detection systems. It will soon be normal for machine learning systems to drive our cars, and help doctors to diagnose and treat our illnesses. It's important that kids are aware of how our world works. The best way to understand the capabilities and implications is to be able to build with this technology for themselves.

2020   https://machinelearningforkids.co.uk/#!/about#top

The AI That Could Help Curb Youth Suicide

In suicide-prevention literature, "gatekeepers" are community members who may be able to offer help when someone expresses suicidal thoughts. It's a loose designation, but it generally includes teachers, parents, coaches, and older co-workers—people with some form of authority and ability to intervene when they see anything troubling. Could it also include Google? When users search certain key phrases related to suicide methods, Google's results prominently feature the number for the National Suicide Prevention Lifeline.

2019-07-15   https://www.nextgov.com/emerging-tech/2019/07/ai-could-help-curb-youth-suicide/158405/

Accelerated Learning

How AI and Data Could Personalize Higher Education

Artificial intelligence (AI) is rapidly transforming and improving the ways that industries like healthcare, banking, energy, and retail operate. However, there is one industry in particular that offers incredible potential for the application of AI technologies: education. The opportunities — and challenges — that the introduction of artificial intelligence could bring to higher education are significant. Personalized learning as a cornerstone.

2019-10-14   https://hbr.org/2019/10/how-ai-and-data-could-personalize-higher-education

5 Ways AI Is Changing The Education Industry

The academic world is becoming more convenient and personalized thanks to the numerous applications of AI for education. This has changed the way people learn since educational materials are becoming accessible to all through smart devices and computers. Today, students don't need to attend physical classes to study as long as they have computers and internet connection. AI is also allowing the automation of administrative tasks, allowing institutions to minimize the time required to complete difficult tasks so that the educators can spend more time with students. Now is the time to discuss the transformations brought by AI in education.

2019-02-06   https://elearningindustry.com/ai-is-changing-the-education-industry-5-ways

Artificial Intelligence, Authentic Impact: How Educational AI is Making the Grade

Adoption of artificial intelligence is on the rise: According to research firm Gartner, 37 percent of organizations have now "implemented AI in some form," and adoption is up 270 percent over the past four years. Schools are following suit: Technavio's "Artificial Intelligence Market in the US Education Sector 2018-2022" report predicts a nearly 48 percent growth rate for AI tools over the next three years. The challenge? Separating market interest from authentic impact. The key to AI success is specificity. It is crucial to define key needs AI tools can meet and shortcomings it can address. This is especially true for K–12 institutions faced with limited time and budgets.

2019-08-27   https://edtechmagazine.com/k12/article/2019/08/artificial-intelligence-authentic-impact-how-educational-ai-making-grade-perfcon

Arts & Culture

AIArtists.org

AIArtists.org curates historic works by pioneers in Artificial Intelligence art, and is the world's first clearinghouse for AI's impact on art and culture. Scroll down to explore our community of AI artists and the critical questions they're investigating, discover AI art tools to use in your creative practice, learn about AI Art history, or learn about ethical issues in AI.

2020   https://aiartists.org/

How AI is changing arts and culture

If you were to ask people how AI could change their lives, they may immediately think of self-driving cars and chatbots. In a business context, increased efficiencies and advanced data analytics would be among the likely responses. But AI is also changing the arts, enriching people's daily experiences, preserving culture and making art more accessible to those unable to visit a gallery or historic site for themselves. In July 2019, Microsoft announced a new and fourth pillar to its AI for Good. This new pillar will focus on AI for Cultural Heritage…to help preserve the languages we speak, the places we live, the artifacts we treasure and celebrate the people who have made an impact.

2019-07-30   https://news.microsoft.com/on-the-issues/2019/07/30/ai-changing-arts-culture/

The Impact of Artificial Intelligence on the Music Streaming Industry

Artificial intelligence and machine learning are positively transforming the user experience on music streaming platforms. Streaming services use the AI to increase storage, improve search engines, and improve the overall experience on their platforms. The adoption of smartphones over a decade ago initially gave a boost to the rise of streaming platforms. The current implementation of the AI and machine learning will take the streaming industry toward a whole new path.

2019-03-21   https://www.digitalmusicnews.com/2019/03/21/artificial-intelligence-music-industry/

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