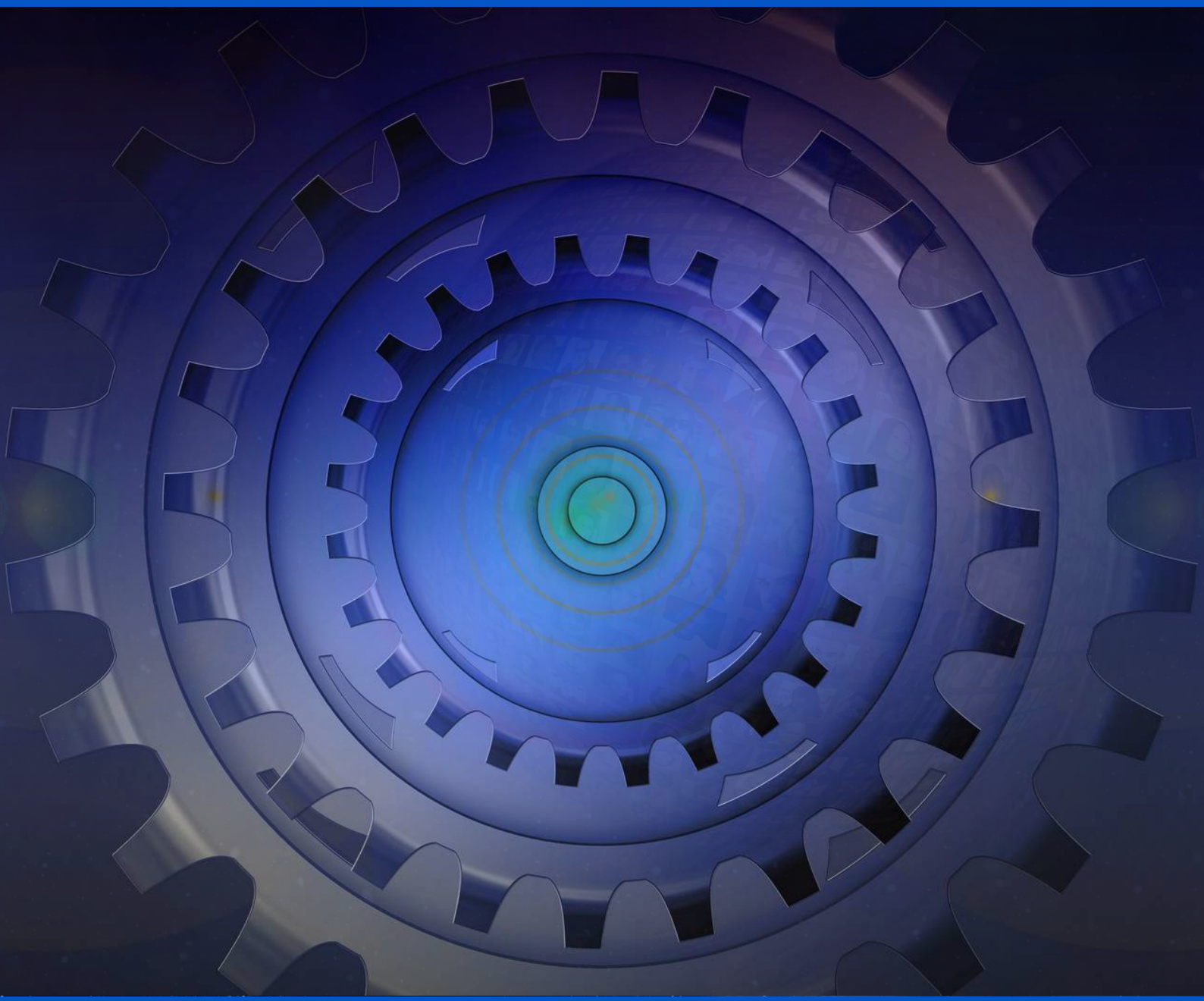
AI4IA CONFERENCE REPORT 2021



UNESCO IFAP

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Information for All Programme

In observance of the International Day for Universal Access to Information (IDUAI)
28 September 2021

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EXECUTIVE SUMMARY

This year the Artificial Intelligence for Information Accessibility (AI4IA) Conference explored nine themes of how AI can promote accessibility. More than 73 presenters contributed in their unique and varied ways to each of AI4IA thematic areas. These themes were: AI Policy and Ethics, AI and Society, AI and Healthcare, Media and the Right to Know, AI & Law, AI & Big Data and Innovation, AI and Creativity, Youth in AI, and the Accessibility Pavilion. The thematic session on AI Policy and Ethics was thought-provoking and immediately captured the central concerns pertaining to AI for Information Accessibility. Eleven presenters showcased not only the complexity of policy development and ethical considerations, but they also represented the global diversity this conference sought to celebrate. The contributions came from India, Egypt, South Africa, France, the United Kingdom, the United States of America, Canada, and Brazil.

The AI and Society theme had thirteen presentaters who explored notions of law, multistakeholder and multisectoral responsibilities, the features of future AI societies and recommendations towards bridging divides. The global representation was excellent, coming from Jamaica, Mexico, United States of America, Canada, Germany, and Uganda. Velu Nair was the only presenter in the theme AI and Healthcare, but it must be noted that due to the prevalence of AI being embedded in health care operations, especially due to Covid-19, this topic did arise quite frequently in other themes. This session critically engaged with medical practitioners, AI and their roles and responsibilities pertaining to healthcare in both complementary and divergent ways. AI is is having an impact in healthcare, especially due to the availability of big (medical) data on a vast collection of health-related data. Utilising this data, deep learning can solve complex problems to guide better healthcare options. The AI health market has progressively increased from 2014 to 2021, and it will only continue to grow. As a result, one can also see the increase in academic publications.

The next theme was Media and the Right to Know. This session showcased the role of the media and the right to know during ten presentations - from the United States of America, Brazil, Colombia, Jamaica, United Kingdom, India, Zambia, South Africa and India. AI Ethical and accessibility considerations also have an impact on public relations, communications and reputation. Public relations officers should ensure that no decision that is made - by a human or AI - should ever cause harm to anyone or their reputation. The topic of fake news is also relevant to the right to know and reputation.

EXECUTIVE SUMMARY

Nine presentations from Brazil, United States of America, France and India explored AI and Law. Could an Artificial Intelligence be seen as an inventor or originator of something, and if so, what might the legal implications be? In addition, the malicious use of AI was considered insofar as it can be used for cybercrimes which ought to be punishable by law. Also considered was how AI could be used to improve legislative decision-making.

The thematic area of AI, Big Data and Innovation explored useful, innovative, and creative ways in which AI can be used to streamline and improve processes across a diverse representation of sectors. Six presentations from the United States of America, Canada, Chile, Germany, South Africa, and Turkey dived into both the opportunities and challenges.

Five presentations from the United States of America, Canada, Jamaica, Israel dived into the Creative scope of AI and the endless possibilities it contains to visualise design, compose music and test our boundaries of comedy and woke culture. Presenters asked whether algorithms can be creative, and how AI can be used to promote human creativity and provide new avenues for creative expression? Presenters explored answers to these questions.

INTRODUCTION

The UNESCO Information For All Programme (IFAP) Working Group on Information Accessibility (WGIA), hosted its second online one-day conference on 28 September 2021. This event was hosted in collaboration with the Kule Institute for Advanced Studies (KIAS) and AI for Society (AI4S) Signature Area, both at University of Alberta, Canada; the International Centre for Information Ethics (ICIE); Future Africa at the University of Pretoria, South Africa; the Centre for New Economic Diplomacy (CNED) in ORF, India; and the Broadcasting Commission of Jamaica. It was organised under the auspices of the UNESCO Cluster Office for the Caribbean, Kingston, Jamaica and the UNESCO Regional Office for Southern Africa, Harare, Zimbabwe.

The theme of the conference was Inclusive AI with topics addressing information accessibility. The conference was organised to commemorate the International Day for Universal Access to Information (IDUAI) 2021 under the global theme, “What We Know about Our Right to Know" and in the context of the COVID-19 pandemic, “The Right to Know- Building Back Better with Access to Information."

International Day for Universal Access to Information focussed on the right to information in times of crisis and on the advantages of having constitutional, statutory and/or policy guarantees for public access to information to save lives, build trust and help the formulation of sustainable policies through and beyond the COVID-19 crisis.

INTRODUCTION

TThe aim of this specific event was on promoting, but also understanding, the barriers to inclusive artificial intelligence. AI can be beneficial to society but if abused it can also be harmful. The theme therefore raised a range of issues, including the relationship between Artificial Intelligence (AI) and Law, AI and Ethics, media and our right to know, creativity and innovation. It is necessary to understand how AI can be made inclusive, thereby benefiting the widest cross-section of society.

This event provided a platform for open discourse involving participants from academia, civil society, private sector, and government. In recognition of the central theme guiding the event - accessibility - the AI4IA promoted accessibility on a number of ways.

The conference organisers, partners and volunteers ensured that all the pre-recorded presentations were closed-captioned for those hard of hearing. In addition, volunteers were present in all the saloon sessions to assists conference delegates and participants during the 28th of September 2021. Using the platform, Gather.Town, provided for alternative virtual conference engagements, thus departing from the usual Zoom or MS Team interfaces which may preclude a variety of users.

In addition to the assistance provided by the committee and volunteers and the closed-captioning, an expression of gratitude is given to the international sign language expert, Mr Andries van Niekerk, National Institute of the Deaf, who provided interpretation in international sign language. Together with his real-time sign interpretation, captioned versions of Monica Desai and Colton Bishop's presentations were also provided to provide greater accessibility to viewers who may be deaf or hard of hearing.

A MESSAGE FROM THE WGIA CHAIR AND PLANNING COMMITTEE CHAIR

Cordel Green, Executive Director of the Broadcasting Commission of Jamaica, and Chair of the IFAP Working Group on Information Accessibility, welcomes all the participants to the Second Artificial Intelligence for Information Accessibility (AI4IA) Conference, held in commemoration of UNESCO's International Day for Universal Access to Information (IDUAI), the 28th of September. The conference this year follows an on-demand format which will allows for better global participation, wider reach and greater inclusivity. Partners, amongst others the UNESCO Cluster Office for the Caribbean and the UNESCO Regional Office of Southern Africa, are thanked.

Samridhi Arora, Chair of the AI4IA Planning Committee, Advocate at the Supreme Court of India, and member of the UNESCO Working Group on Information Accessibility, also welcomes all participants. It is noted that since accessibility is the core focus of the conference, volunteers have been organised to assist on the Gather.Town platform and with the programme. An overview is provided of the platform, the rooms, and the thematic areas of the conference. On a final note, a sincere appreciation is extended to all the partners, presenters, the WGIA members and especially the AI4IA Conference Organising Committee.

UNESCO CLUSTER OFFICE FOR SOUTHERN AFRICA

PRESENTATION BY MARTIALE ZEBAZE KANA

This year's slogan is "The Right to Know: Building Back Better with Access to Information". It relates well with artificial intelligence, its capabilities, opportunities and challenges. We also see the importance of promoting literacy, education and the use of Information and Communication Technologies (ICTs). The global pandemic has unfortunately precluded many children from learning due to not having access to ICTs to attend online learning; being kept out of school further exacerbates poverty. Mis- and disinformation and fake news are areas of vulnerability, for people can easily believe such misinformation. Artificial Intelligence can play a role in mitigating the spread of such disinformation by identifying false information. AI can also assist with education by extending access to different languages and translating classroom instructions, whilst also promoting local, regional, and international education resource exchanges and collaboration.

AI can also automate administrative tasks, hence supporting teaching staff to be more effective and supporting them in their increased duties. There are currently low adoption rates of AI across the African continent, but this does provide an opportunity for states to collaborate to promote increased access to and integration of AI technologies. It is important for states to take a proactive stance on the development of policy and adopting of AI. It is recommended that states adopt, and adapt to, the technological and Fourth Industrial Revolution. African states can learn from the European Union when it comes to AI policies and laws, but it must be noted with the development and adoption of legislation and policies, we must avoid stifling innovation. Recommendations for African states include:

- The need to strengthen policy initiatives for AI financing
- Streamline the regulatory frameworks for AI
- Enhancing capacity for AI governance

In conclusion, care should be given to updating education, skills and training systems to strengthen human development and protecting against algorithmic bias. We call on African states to work with UNESCO, in promoting AI to be used as a tool to benefit the African continent.

UNESCO CLUSTER OFFICE FOR THE CARIBBEAN

PRESENTATION BY SAADIA SANCHEZ-VEGAS, PHD: DIRECTOR AND REPRESENTATIVE UNESCO CLUSTER OFFICE FOR THE CARIBBEAN

A welcome to all to the second online AI4IA Conference and an acknowledgment of the International Day for Universal Access to Information, observed each year on the 28th of September. A special expression of gratitude is given to UNESCO's Information For All Programme, the Working Group on Information Accessibility for organising the event, as well as the prestigious parties who supported this event. It is noted that the 74th UN General Assembly declared the 28th of September as the IDUAI in October 2019. The theme this year is "The Right to Know". UNESCO is facilitating a global dialogue that highlights the role of access to information laws and their implementation to build back solid institutions for the public good and sustainable development.

COVID-19 has raised the need for a global reflection on the impact of access to and the quality of information, democratic participation, and the culture of peace. We should also reflect on the impact it has on decision-making and the exercising of human rights. Together with the social and ethical requirements of access to information by the public, there is also increased legal recognition of the right to access to information. Compare that in 1991 only 12 countries had laws guaranteeing citizens rights to access government information, then it was 40 countries in 2009, and 126 countries in 2019.

Unfortunately, there are challenges in terms of inclusion of international standards. Having access underscores the importance of citizens having the opportunity to access information by means of ICT infrastructure, that it is affordable, and that they have the skills to engage with ICTs in a meaningful way. Other challenges include hate speech and disinformation. There is an urgent call to action for us all to tackle these obstacles by joining our efforts and resources to provide more access to technology and information, ensuring digital cooperation and transformation. Examples of UNESCO's projects that promote access include the ROAM-X principles as well as the Global Framework for Ethics of Artificial Intelligence.

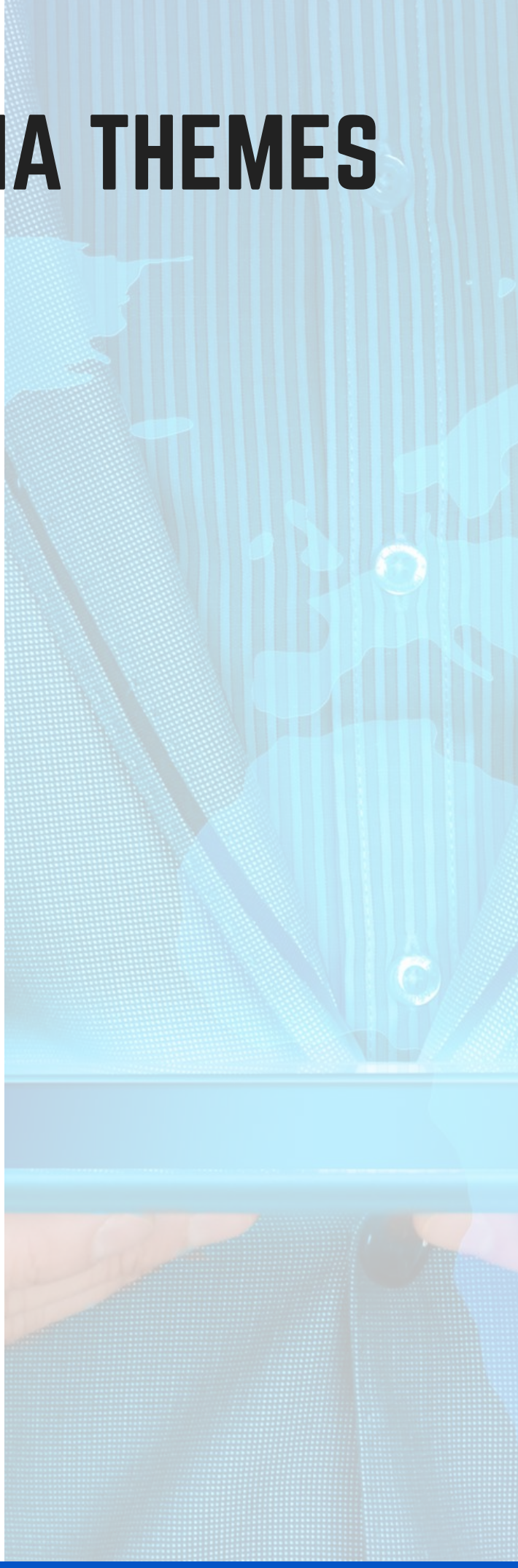
In essence we must ensure that we provide a safe, equitable and open digital future for all. This implies that no one should be left behind.

THEMES, PRINCIPLES, RISKS & CHALLENGES

RECURRENT AI4IA THEMES

The following themes occurred throughout all sessions:

- AI is ubiquitous
- Rapid development of technologies
- Necessity of policies, guidelines, regulations and legislation (which take slower than the development of technologies)
- Promotion of various literacies, include AI, digital, media and information literacy
- Responsibility of big technology companies and governments
- Role of intergovernmental and international cooperation
- Enforcement of racial, ethnic, religious and gender bias
- AI brings both opportunities and challenges
- Efforts must be made to fight against mis- dis- and malinformation, fake news, filter bubbles and echo chambers
- Colonisation of data
- Users, legislators, researchers, journalists – all sectors of society – must be informed of, and understand how, these technologies work



FREQUENT AI4IA THEMES

- ETHICS
- FAIRNESS
- OPENNESS
- TRANSPARENCY
- PRIVACY
- NET-NEUTRALITY
- PROMOTION OF DEMOCRATIC SOCIETIES
- FREEDOM OF EXPRESSION
- DIVERSITY
- INCLUSION
- ACCOUNTABILITY
- RESPONSIBILITY OF DEVELOPERS

"The promise of artificial intelligence in medicine is to provide composite, panoramic views of individuals' medical data; to improve decision making; to avoid errors such as misdiagnosis and unnecessary procedures; to help in the ordering and interpretation of appropriate tests; and to recommend treatment."

Eric Topol
Deep Medicine: How Artificial Intelligence Can Make Healthcare Human Again

AI4IA RISKS & CHALLENGES

- THREATS TO SOCIAL INTERESTS
- TREATS TO THE ENVIRONMENT
- THREATS TO DEMOCRACY
- SYSTEMIC RISKS

"Artificial intelligence can be a force for good, helping societies overcome some of the great challenges of our times. But AI technologies can have negative, even catastrophic, effects if they are used without sufficient regard to how they affect people's human rights,"

Michelle Bachelet

UN High Commissioner for Human Rights

AI4IA ONLINE PRESENCE

SOCIAL MEDIA TAGS

TWITTER | FACEBOOK
#RightToKnow #AccessToInfoDay

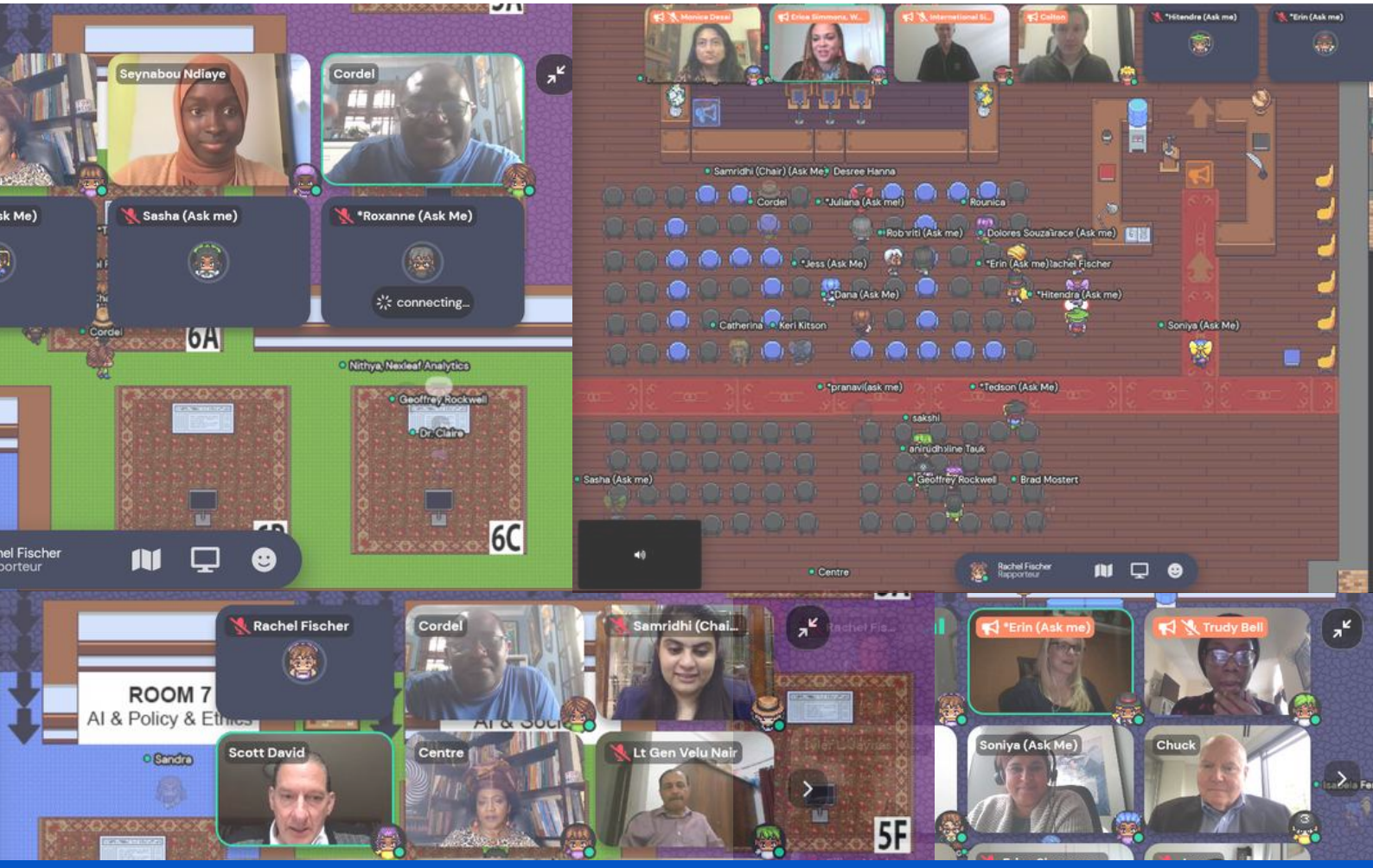
@ICIE_IRIE
@CaribbeanUnesco
@ANIE_ACEIE
@KIASAlberta
@UofA_Ai4Society
@bcjamaica
@unescoROSA
@ICIEInfoEthics
@KIASAlberta

DIGITAL LIBRARY LINKS

A recording of the conference with presentations **is available here**!

The AI4IA community and recordings were all made available on

GATHER.TOWN



AI4IA THEMATIC AREAS

THE CONFERENCE CONSISTED OF THE FOLLOWING THEMATIC AREAS

1. AI Policy and Ethics
2. AI and Society
3. AI and Healthcare
4. Media and the right to know
5. AI and Law
6. AI, Big Data and Innovation
7. AI and Creativity
8. Youth in AI
9. Accessibility pavilion
    a. Google Camswitch
    b. Facebook Accessibility

All sessions are available on YouTube to watch again! Just click on the theme.

THE FOLLOWING SECTIONS CONTAIN A SUMMARY OF EACH THEMATIC AREA AS WELL AS THE PRESENTERS

NARRATIVE REPORT: THEME 1

AI POLICY AND ETHICS

PRESENTERS
THEME: AI, POLICY AND ETHICS

WENDELL WALLACH

Yale University Interdisciplinary Center for Bioethics; Senior Advisor, Hastings Center

Ethics Engineering and Oversight

ARTHUR BEZERRA

Full researcher at the Brazilian Institute of Information in Science and Technology (IBICT) and professor at the Post-Graduate Program in Information Science (PPGCI IBICT UFRJ).

Artificial intelligence, class, gender and race: inclusive challenges for exclusive technologies

YVES POULLET

Professor, University of NamurChair of IFAP Working Group on Information Ethics ["A precis of the proposed EU AI Act"]

Do we need regulation of the digital platforms? - An EU approach

EMMA RUTTKAMP-BLOEM

Philosophy, University of Pretoria; Centre for AI Research

Actionable Meaningful AI Ethics Regulation

JAMES BRUSSEAU

Philosophy Professor at Pace University, New York City, and Visiting Research Scholar, Signals and Interactive Systems Lab, Department of Computer Science and Information Engineering, University of Trento, Italy.

AI Ethics Decentralised and Accelerated

PRESENTERS
THEME: AI, POLICY AND ETHICS

DR. LOUISE PRYOR

President of the Institute and Faculty of Actuaries

Ethical data science

MARJORIE NGWENYA

Non-Executive Director and Life Coach

Ethical AI and Consumer Protection

DR GOLESTAN SALLY RADWAN

Minister's Advisor for Artificial Intelligence - Ministry of Communications and Information Technology - Egypt

AI Strategy

MOHAMMED EL-GUINDY

Cyber security expert in the Middle East. Cybercrime researcher, cyber terrorism expert, and consultant for international organisations.

Malicious Use of AI

FELIPE CHIBÁS ORTIZ

Associated Professor of University of São Paulo - USP Regional Representative for Latin America UNESCO MIL Alliance

AI, Policy and Ethics: Three related issues in post-human society

AI POLICY AND ETHICS

The thematic session on AI Policy and Ethics, was thought-provoking and immediately captured the central concerns pertaining to AI for Information Accessibility. Eleven presenters showcased not the only the complexity of policy development and ethical considerations, but they also represented the global diversity this conference sought to celebrate. The contributions came from India, Egypt, South Africa, France, the United Kingdom, the United States of America, Canada, and Brazil.

Wendell Wallach presents on Ethics, Engineering and Oversight and situates his departure in the ubiquity of ICTs and emerging technologies, as well as its rapid development and deployment. He asks whose values will shape the trajectory of these developments? Grounding the need for the development of policy and ethics guidelines in already-existing global initiatives, such as the SDGs, OECD AI principles, UNESCOs Ethics of AI draft Recommendations and the IEEE's Ethically Aligned Design, it is further argued that the legislation lags. Due to the slower pace of guidelines, policies and legislation, the commodification and politization of these technologies vis-à-vis surveillance capitalism, the weaponization of digital tools might inevitably drive the development. He concludes that a value reset, soft law and well-designed policies and government reforms, can nudge the technology trajectory onto a sustainable path.

Artificial Intelligence, class, gender and race are Arthur Coelho Bezerra's the focal points. He succinctly states that information accessibility is closely related to educational accessibility. Taken a step further, he argues that educations costs money and that it then also becomes the breeding ground for deepening inequalities amongst those who can access quality (paid) information and educational resources and those who do not have the resources. Not even zero-rated websites solve these concerns, since it delimits the ability of individuals to visit other websites to verify the accuracy and validity of the information they do receive, which ultimately contributes to the veracity of mis- and disinformation whilst embedding echo chambers. Contrary to the usual arguments of access to information, Bezerra warns against information dependence and being vary of big technology companies' efforts to encourage addiction to the internet, social media platforms and information consumption.

AI POLICY AND ETHICS

Yves Poullet presents from and European Union perspective on whether digital platforms require regulation. He also specifically focusses on very large online intermediaries and social media and e-commerce platforms who currently own an approximate 10% of the market. He states that the EU functions as a gatekeeper and therefore seeks to protect civil liberties - such as privacy - by means of its EU Data Protection (GDPR) legislation. Regulation of digital platforms are imperative, especially if we wish to continue nourishing a lively democratic society respecting social justice imperatives.

Elaborating on the development of recommendations on AI Ethics, Emma Ruttkamp-Bloem, presents and overview of actionable meaningful AI ethics policy. This policy is UNESCO's Recommendations for an Ethics of AI, as drafted by the UNESCO Ad hoc Expert Group on the Ethics of Artificial Intelligence (AHEG). Not only do these recommendations include principles to guide the development, deployment and usage of AI, but it also promotes inclusivity, fairness and diversity, especially by encouraging multicultural participation. This presentation is complemented by Golestan Radwan who also focusses on the Recommendations. Radwan presents a detailed overview of the values, principles and policy sections and aligns it with UNESCOs central domains of work, such as the Education, Science, Culture and Communication and Information sectors. She concludes that it is imperative to regard this document as a living document which will need to be reviewed regularly every few years.

James Brusseau contemplates a decentralised and accelerated Artificial Intelligence Ethics. He problematises not only information for all, but also the nature and available of information at all. He states that the discourse should not just focus on the protection of data, but rather be concerned that the individual can be identified by deanonymisation of a conglomerate of data sets. Due to the lag in AI ethics, regulations, policies and legislation, he argues that AI ethics must be decentralised and be made accessible to everyone across all phases of the lifecycle. AI ethics should not be in the purview of experts only, since it does not only impact experts. The development of AI ethics can therefore be accelerated if more people have access to it, thereby removing bottlenecks caused by regulators and experts.

AI POLICY AND ETHICS

Towards adding to the expanding literature on AI and assisting with ethical guidelines, Louise Pryor presents the “A Guide for Ethical Data Science”. Although this guide specifically pertains to the domain of actuarial sciences, its thematic recommendations are applicable to a variety of sectors who can use guide. Marjorie Ngwenya presents on ethical Artificial Intelligence and consumer protection and the role businesses can play in resolving issues caused by AI. She emphasises the responsibility of developers, governments and industry in ensuring that ethical considerations are part of parcel of the entire lifecycle of AI and its management. These sentiments are echoed by Danielle Davis who seeks to warn against the ethical and legal implications of AI particularly with regards to marginalised societies. She argues that whilst AI can make data-driven decisions, it cannot replace human abilities such as judgement and values such as freedom.

Positioning the role of media and information literacy in the AI and information accessibility deliberations, Felipe Chibás Ortiz, refers to the evolution of smart cities to media and information literate cities. In these cities factors that enable literate citizens are promoted. Literate citizens can actively contribute to the Fourth Industrial Revolution and will therefore not be excluded in the continuous development and integration of AI in our daily lives. He argues that we need multicultural, transdisciplinary and multistakeholder collaboration, policies, and solutions to concerns and gaps presented by emerging technologies.

Examples of such concerns include the malicious use of AI (MUAI), as expanded on by Mohammed El-Guindy. MUAI is defined and elaborated on, indicating how governments, criminals and organisations can use it to increase their efforts, whether it is surveillance, criminal activities or the pursuit of profit. Due to subversive nature of MUAI, education on ethical consideration of ICTs and comprehension of how these technologies work, will enable policymakers, researchers and even general society to better identify, and deal with MUAI.

NARRATIVE REPORT: THEME 2

AI AND SOCIETY

PRESENTERS
THEME: AI AND SOCIETY

PROF VERENE SHEPPARD

Director, Centre for Reparation Research, The University of the West Indies

AI and Racial Profiling

VIJAY CHAUTHAIWALE

In-Charge, Foreign Affairs Dept Bharatiya Janata Party

Can Transparency Restore Accountability?

NITHYA RAMANATHAN

CEO & Founder, Nexleaf Analytics

Decolonizing Data

SCOTT L DAVID

Executive Director: Information Risk and Synthetic Intelligence Research Initiative. University of Washington - Applied Physics Laboratory

Synthetic Human Intelligence In Human History

SEYNABOU NDIAYE

Software engineer at Sama

AI, a tool to bridge equality gaps?

SHEILA BELADINEJAD

President Women in AI & Robotics Germany e.V. womeninairobotics.de

Women in AI & Robotics

SUSAN AGWANG

African Freedom of Information Centre

AI and Access to Information by AFIC

PRESENTERS
THEME: AI AND SOCIETY

ADRIANA LABARDINI

LL.M.Founder of Law, Technology & Development & Member of the Board of Rhizomatica, an NGO supporting community networks of indigenous communities across the world.

Cognitive Justice and AI

JASON LEWIS

University Research Chair in Computational Media and the Indigenous Future Imaginary, Concordia University

Future Imaginaries Through Indigenous AI

DIANA PAREDES

CEO and Co-Founder of Suade. World Economic Forum Global Innovator. Board member DTCC Deriv/SERV.

Reimagining Finance: with Regulatory Reporting Technology

CHUCK HOWELL

Chief Scientist for Responsible Artificial Intelligence, the MITRE Corporation

Enabling the Right to Know “Left of Algorithm”

HERO LAIRD

President, Digital Law & Innovation Society

Ethics, AI & the Law: A truth about stories

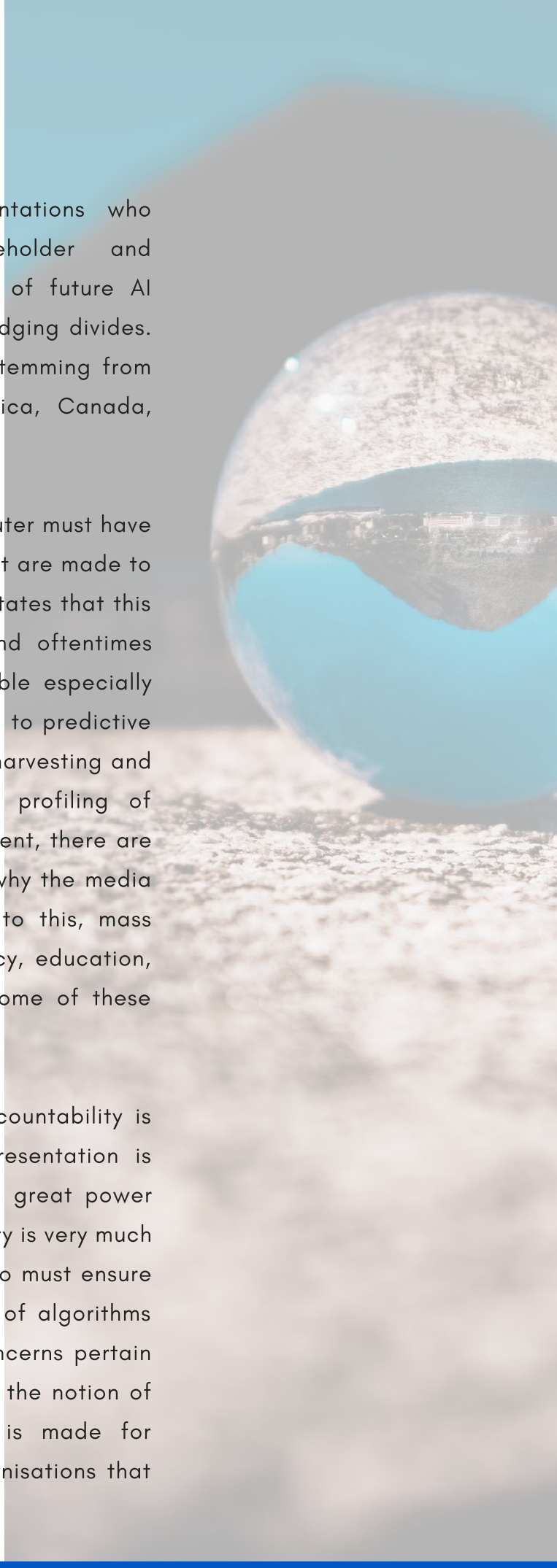
CLAIRE NELSON

Lead Futurist and Chief Evangelist, The Futures Forum

XYNOGENY? How We Share Decision-Making

AI AND SOCIETY

This thematic area had thirteen presentations who explored notions of law, multistakeholder and multisectoral responsibilities, the features of future AI societies and recommendations towards bridging divides. The global representation was excellent! Stemming from Jamaica, Mexico, United States of America, Canada, Germany, and Uganda.



Verene Sheppard argues whether the computer must have gotten it wrong, and the various excuses that are made to (silently) condone bias and prejudice. She states that this excuse has been used for the misuse, and oftentimes abuse, of AI. These instances are observable especially within law enforcement agencies, extending to predictive policing-based on facial recognition, data harvesting and dataveillance, all of wish contribute to profiling of citizens. She notes that with any advancement, there are related opportunities and risks. But that is why the media must play a critical role in society. Due to this, mass media must be used as a tool for advocacy, education, and public awareness and can mitigate some of these concerns.

The question Can transparency restore accountability is posed by Vijay Chauthaiwale and the presentation is opened by the oft quoted statement “with great power comes great responsibility”. This responsibility is very much situated on the shoulders of developers, who must ensure due consideration are given to the design of algorithms and autonomous systems. One of these concerns pertain to how the algorithms work, which leads to the notion of the uninterpretable “black box”. A call is made for transparent AI and the governance of organisations that develop, design and implement AI.

AI AND SOCIETY

Inaccessibility of data, especially if it concerns the local communities from when it was originally collected without them owning the data, is what is meant with the term colonised data. Nithya Ramanathan problematises this occurrence and makes a call for the decolonizing of data. This can be achieved by advocating for countries to own their data, ensuring countries are involved in the decision-making pertaining to their data and promoting standards such as interoperability.

Following from the colonisation of data, Scott L David presents on the rise and demise of computational sovereigns and the emergence of verified information community environments. He refers to historic extraction of resources in a colonial setting, even if there was consent, the same is true for extraction of electronic resources. Currently, if you control the data, you control the data. He argues that we need to consider meaning of concepts and values, such as the inherent differences between access and accessibility. If you do not get the meaning of information, even if you have access, it will not be useful to you. In essence, equity remains a big focus when discussing the actual aim of ethics insofar as it is applied to AI and emerging technologies.

Although it is noted that ethics should not be conflated with legislation, it is worthwhile to consider how equity can be promoted across societies. Community is the most authoritative source of where identity comes from. Perhaps then one day, after the computational sovereigns, maybe humans will come back and explore the notion of "human" community again and the knowns and unknowns of what is means to be human. In this instance, it is possible to consider that AI is giving us a common challenge to ask, "Who do we want to be"? This is a good question to ask a human species.

Seynabou Ndiaye explores how AI can be a tool to bridge equality gaps whilst acknowledging it has certainly contributed to the creation of gaps. She provides examples of AI's contribution to improving literacy, providing access to applications pertaining to healthcare information, agricultural practices, resource allocation and consumption, as well as the streamlining and delivery of essential services. Notwithstanding the models and technologies that achieve social good, these concerns can be compounded by a lack of regulation, monitoring and evaluation

AI AND SOCIETY

Therefore, it is essential that the public must be informed of AI, its implications and how it works, policymakers must also understand how AI works to better respond to the rising challenges, and standards should be created to improve transparency.

Sheila Beladinejad provides a feminist perspective to Women in Artificial Intelligence and Robotics. She unpacks the ways in which digital transformation and AI related to access to information, the effects of gender disparity in AI, and ultimately, she provides recommendations on what can be done to address these issues. Characteristics which contribute to such gender (and even racial, religious and ethnic) disparities, include the type of data available, the quality and accuracy of data, as well as the explainability of algorithms and how it interprets this data. On the other hand, due to the digital transformation, more women should be able to access economic and education opportunities, which leads to the empowerment of women.

The issue of knowledge representation and inclusion is raised by Adriana Labardini when unpacking cognitive justice. She explains what is meant by this type of justice and links it to indigenous knowledge and the promotion of all forms of knowledge to co-exist. She argues that AI, and society, need to acknowledge and include knowledge and value pluralism to allow for diversity and inclusive design of emerging technologies.

Towards promoting opportunities for small businesses and new market entries by entrepreneurs, Diana Paredes showcases the platform Suade, which is a tool - utilising AI - that assists with increasing the capacity of bankers to have better access to information.By employing Agile Regulation Technology, stable and well-informed financial services will contribute to stable societies. Financial technologies, and the regulation of these technologies, assists with agile governance because it not only promotes responsibility over profit, but it also seeks to improve digital infrastructure and services.

AI AND SOCIETY

A very informative and technical presentation on algorithmic effectiveness is made by Chuck Howell. He recommends how Sociotechnical Systems (STS) will enable the right to know and improve mitigation efforts to reduce harm in an autonomous system. On the concept "Left of the algorithm", he explains that it implies that checks and balances need to occur prior to the action taking place. He indicates that participatory design is essential in the early design phases of algorithms. Such an inclusive approach helps towards understanding how AI systems affects, and is affected by, social constructs, assumptions, individual and collective behaviour.

Hero Laird's presentation on Ethics, Artificial Intelligence and the Law: A truth about stories, the argument is made that if technology can affect law, then it means law can affect technologies. How do stories fit in? Laird explains that we co-evolve with technologies, law, and other constructs in society, These aspects influence the narrative we use and apply to current contexts and shape our interaction with one another and AI. We need to ensure that as humans, we continue to shape society and what it means to human, and not let AI shape this for us. The role of society is echoed by Susan Juliet Agwang who represents a pan-African civil society organisation. It is crucial that we utilise tools - such as AI - and align our actions towards achieving the Sustainable Development Goals (SDGs) and observance of Article 19 of the Universal Declaration of Human Rights (UDHR).

Claire Nelson takes us on a journey of future decision-making, tools, industries, education, elderly care as found in the age of AI. Her journey extends beyond the SDG goals of 2030, into 2050 and beyond. Elaborating on the vast array of these services, she says that although these opportunities sound exiting, it is imperative that is we are ready to meet this future by getting smart and being equipped with the right attitude and abilities. How do we cultivate these attitudes and abilities? Jason Lewis presents Future Imaginaries through indigenous Artificial Intelligence, by basing it on his culture and how it is imagined - visualised, enacted and presented - in an AI-informed society made accessible in one's mother tongue. He asks what does it mean to learn about science and technology within your own language?

NARRATIVE REPORT: THEME 3

AI AND HEALTHCARE

PRESENTERS
THEME: AI AND HEALTHCARE

LT. GEN. DR VELU NAIR

Group Head- Medical Services & Chief Consultant - Haemato-Oncology & Bone Marrow Transplant of Apollo-Comprehensive Blood & Cancer Care, Ahmedabad, India

AI and Healthcare

This section pertaining to healthcare is of utmost importance. AI and its roles and responsibilities pertaining to healthcare occurred regularly during the conference. This is especially true in the wake and realities of COVID-19.

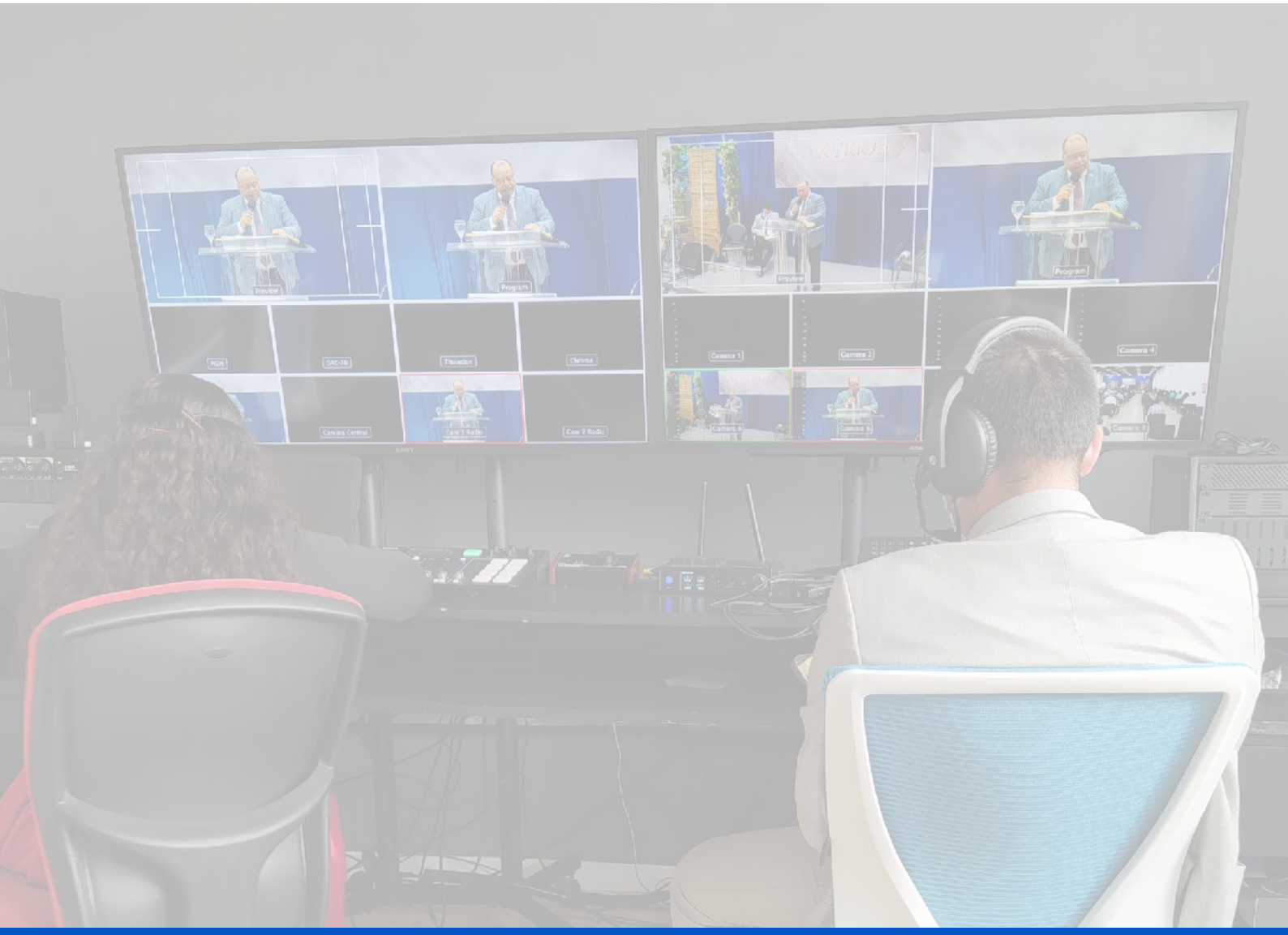
Various applications of AI in Healthcare include:

- Monitoring
- Clinical decision-making
- Treatment options
- Mining and managing medical data with AI
- Logistical and administrative applications
- Clinical trials, training and medical education

AI is impactful in Healthcare, especially due to the availability of big (medical) data on a vast collection of health-related data. Utilising this data, deep learning can solve complex problems by involving high dimensional data and provided useful information to guide best healthcare options. The explosion of AI health marker has progressively increased from 2014 to 2021, and it will only continue to grow. Resulting from this, one can also see the increase in academic publications.

NARRATIVE REPORT: THEME 4

MEDIA AND THE RIGHT TO KNOW



PRESENTERS
THEME: MEDIA AND THE RIGHT TO KNOW

ANDREW SMITH

Public Relations and Policy Manager Chartered Institute of Public Relations (CIPR)

The Impact of AI on PR, Communications and Reputation Management

SHALABH UPADHYAY

Founder, CEO, Editor In Chief of NEWJ

AI's Battle with Fake News

KARA BRISSON-BOIVIN

Director of Research, MediaSmarts

Algorithmic Awareness: Conversations with Young Canadians about Algorithms and AI

MARCO SCHNEIDER

Brazilian Institute of Information on Science and Technology (IBICT). Fluminense Federal University (UFF). Internacional Center for Information Ethics (ICIE).

The right to know what? From the corporate media gatekeeping to the AI confirmation bias filters of big tech corporations: ethics, credibility, disinformation

KRISTEN TCHERNESCHOFF

Programes Director, Wikitongues

Digital language activism

PRESENTERS
THEME: MEDIA AND THE RIGHT TO KNOW

NAZIMA RAGHUBIR

Journalist/President of the Association of Caribbean Media Workers

What AI means for the media in the region in the midst of some already challenging times

ERNESTO OROZCO OROZCO

Chair of Platform of Regulators of the Audiovisual sector of Iberoamerica (PRAI) and Commissioner of Audiovisual Content at the Communications Regulation Commission of Colombia (CRC).

Media and the right to information (Regulator perspective)

JAN VERMEULEN

Editor for MyBroadband

The right to know is not absolute. When does the public interest outweigh that of the individual or state? What are some of the threats and obstacles to investigative journalism?

DANIEL SIKAZWE

Journalist in Zambia

AI and Journalism

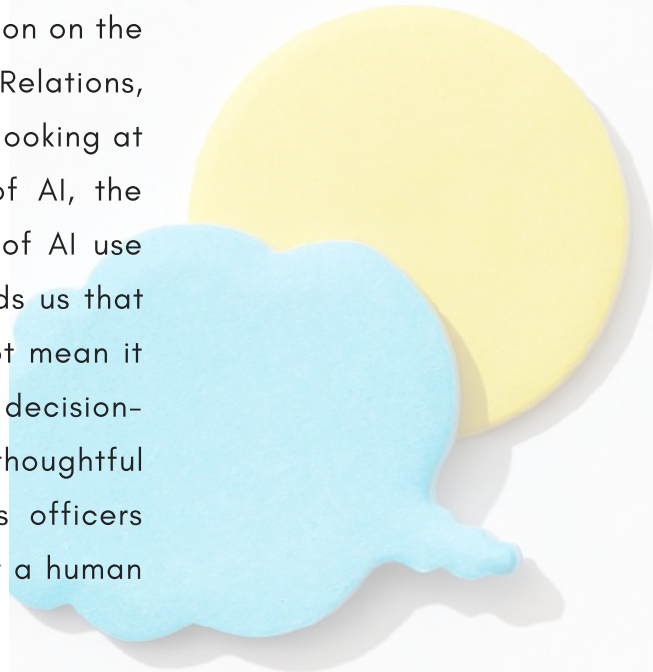
THORISO MALOKA

Radio Broadcaster for POWER FM, Consultant and Youth Ambassador

Role of the media in creating access to information, leveraging off of emerging technologies

MEDIA AND THE RIGHT TO KNOW

Showcasing the role of the media and the right to know, ten presentations - from the United States of America, Brazil, Colombia, Jamaica, United Kingdom, India, Zambia, South Africa and India - expand on the topic. Andrew Bruce Smith opens the session with his presentation on the impact of Artificial Intelligence on Public Relations, Communications and Reputation. He does so by looking at three focal areas, which include the ethical of AI, the impact of AI and the reputational implications of AI use within the domain of Public Relations. He reminds us that just because something can be done, it does not mean it should be done. The cornerstone of ethical decision-making, especially in the role of AI, is to make thoughtful and thought-through decisions. Public relations officers should ensure that no decision that is made - by a human or AI - should ever cause harm to anyone.



In consideration of avoiding harm, Shalabh Upadhyay presents on AI's battle with fake news. It is noted that before the internet and information deluge, information was finite and it depended on journalists to collect, curate and present it. However, now with the emergent technologies such as AI, the proliferation of information (experienced as information overload) appears on the spectrum of being messy, voluminous, uncurated and even manipulated. Shalabh does argue this is not all for the bad: there are exciting opportunities for current and future journalists to harness AI to improve their reporting processes. AI and other technologies may continue to develop, but so will our abilities as humans to utilise these. Therefore, it is incumbent on society, and especially journalists, to ensure they understand how these technologies work and how it can be used to shape the future.

MEDIA AND THE RIGHT TO KNOW

The media and sphere of journalism do not only impact the lives of adults. Algorithmic awareness also heavily features in the daily routines and interactions with the youth.

Kara Brisson-Boivin, from MediaSmarts, presents a study on conversations with young Canadians about algorithms and AI. This is an extremely insightful study looking at the assumptions and lived experiences of the youth, via a very interactive study to gauge their awareness of the implications and workings of AI and big data collection. The study both captures their pre-study opinions and compare these with their responses following a three-step game-based educative session. This study is indicative of the initial levels of trust displayed by the youth in engaging with online and social media platforms, but also their frustration and discontent when realising the implications on their personal information and profiling based on aggregate data. This study makes essential the need to address issues pertaining to protection, awareness, control, and transparency of algorithms.

These considerations lead to Marco Schneider's presentation on the right to know what? One can promote the right to know in general, but how is the quality and reliability of available information guaranteed. Not all information needs to be known, such as for example information pertaining to state security and an individual's bank account details. On the other hand, there can be information available that is dangerous, misleading and hurtful. The right to know is therefore not absolute, and neither is all information necessary. That is why the qualitative, and not just the quantitative, elements of information access need to be considered within a fair and just society.

When considering a fair and justice society, Nazima Raghubir asks who are the guardians of information held by a society, organisation or entity? She recommends that the media, or broadcasting agencies, must be part of the industry to promotes awareness on media and information literacy, so as to best inform and guide the citizenry. This is especially true in the current challenging times.

MEDIA AND THE RIGHT TO KNOW

One might ask how possible it is for a broadcasting agency, media institute or communication regulator to ensure such accessibility and quality standards are integrated and maintained? This is the perspective Ernesto Orozco brings to the table as a representative of the Communications Regulation Commission in Colombia. He provides and overview of steps taken by the regulator to improve diversity in media content delivery, not only in terms of multilingual capabilities, but also in consideration of marginalised, vulnerable or rural communities. Not only do they seek to improve audio-visual content, but they also want to avoid content that might infringe on the rights of others, such as for example excluding hate speech. The regulator enriches their practices by conducting academic research, of which the results are fed back into regulations and service support to meet the needs of the public.

Jan Vermeulen seconds the role of the media in promoting and upholding a democratic society, especially insofar it is seen as the fourth estate (or the fourth pillar of a democratic society). Pertaining to the right to know, and the issue concerning the “what”, Vermeulen expands on the instances of information which should not be known, such as the identities of recently deceased, witness, victims, minors and suspects of court cases and even the publication of graphic images. If the distribution of information is not managed, there can occur an erosion of trust as well as the proliferation of mis- and disinformation. The public can easily be manipulated by the selective use and curation of information to meet the objectives of those in power.

MEDIA AND THE RIGHT TO KNOW

Daniel Sikazwe states that AI has the ability to help with journalism and the citizens' right to know. It provides tools to evaluate information, distribute and package it, but also to verify it. Conversely, it is acknowledged that it can be used a tool to harm or influence the public. Essentially, AI can help create a truly free press which is not defined by being homogenous, but instead known for being welcoming of diversity and the promotion of value pluralism. In addition, the democratisation of information puts pressure on traditional media to raise the standards of research, consolidation, curation and communication of information.

It would be very difficult to discuss the communication of information without introducing the importance of language diversity. Especially the accommodation of local, native and mother tongue languages. This is an important topic raised by Thoriso Maloka who presents from a South African context where there are eleven official languages. AI makes media and information more accessible to communities by its ability to provide speech-to-text services, sub-titles and automatic translation. Examples are provided of organisations that have developed radios which require less electricity to function within rural settings that do not have regular or trusted electricity provision. In a society who is dependent on quality and accurate information - for example in the build-up to elections - it is imperative to make information available in a language and medium which the youth, elderly and non-English speaker can access.

Kristen Tcherneschoff absolutely supports this notion by recognising that minoritized and indigenous languages have been displaced by dominant languages through colonisation and forced assimilation. This leads to her presentation on digital language activism and the process of language reclamation. She advocates for a positive approach, stating that dominant discourses pertaining to language reclamation tend to focus on the decline of languages spoken in the world. Instead, there are numerous instances where minority languages are being revitalised by families, the youth and community members. These practices are very much enabled through the use of digital spaces, which is making it more possible for communities to connect and share their language experiences and histories.

NARRATIVE REPORT: THEME 5

AI AND LAW

PRESENTERS
THEME: AI AND LAW

CAROLINE TAUK

Brazilian Federal Judge, Columbia Law School Visiting Scholar, holds a Master Degree from the University of the State of Rio de Janeiro, Assistant Judge of Justice Barroso from the Brazilian Supreme Court

Can AI be an inventor

SAMRIDHI ARORA

Advocate, Supreme Court of India.

AI and Cyber Terrorism

AMEEN JAUHAR

Team Lead, Centre for Applied Law & Tech Research (Vidhi Centre for Legal Policy)

Using AI to enhance legislative administrative efficiency in India

GARY MARCHANT

Regents Professor and Faculty Director, Center for Law, Science & Innovation, Arizona State University

Soft Law Governance of AI and the Right to Know

JUSTICE AK SIKRI

Jurist & Former Judge of Supreme Court of India

Growing Threat to Privacy

PRESENTERS
THEME: AI AND LAW

JAMES SHERER

Partner, BakerHostetler

Ethics in Artificial Intelligence and a Practical Approach to Presentation and Defense

ISABELA FERRARI

Brazilian Federal Judge, Member of the Information for All Working Group on Information Accessibility (UNESCO)

The Honorable AI: risks and possibilities of algorithmic decision making in the Judiciary

FILIPE MEDON

PhD candidate at the State University of Rio de Janeiro. Professor at the Federal University of Rio de Janeiro (UFRJ). Author of the book "Artificial Intelligence and Civil Liability".

Civil Liability and AI

DAN SHEFET

Lawyer

AI and justice

AI AND LAW

Nine presentations from Brazil, United States of America, France and India explore the legal and regulatory domains of AI. Caroline Tauk poses the question of whether Artificial Intelligence can be an inventor? An example is used of an AI that designed a painting - known as "The Next Rembrandt" - after having been trained on Rembrandt's paintings with the instructions to replicate it. Even art specialists could not clearly distinguish between Rembrandt's and the AI's styles. This example is indicative of AI's ability to not only mimic, but also creates new products, albeit works of art, inventions, documents etc. Due to AI's ever-growing ability, the role of Intellectual Property must be reflected on. Although there may be the systematic recognition of AI as inventor, we should continue to be concerned about the rights of the inventor. According to Tauk, the inventor must be the designer, and we should separate the inventor from the one who receives the royalties. An issue that occurs here is the fact that we are trying to humanise the machine. Once machines are being humanised, the principle of agency comes to the fore. In essence, even if AI can be creators and be creative, there must always be a human involved.

AI and Cyber Terrorism are the focal points of Samridhi Arora's presentation. She very succinctly states that from time immemorial man has not only endeavoured to understand life, but also to create life itself, such as with example AI. AI and other emerging technologies bring with it a conundrum: it both promotes and weakens cybersecurity. Due to the utilisation of data gathering and analyses, supported by natural language processing which can help strengthening risk prediction, cyber terrorists can use the same skills and technologies to circumvent such protective mechanisms. To mitigate this, it is imperative to stay protected against current and emerging threats, together with observing developments in emerging technologies and also to understand how these technologies work. In addition to understanding how AI works, multistakeholder collaboration in national and international platforms are requisite to standardised and promote best practices and the development of policy.

AI AND LAW

AI and its governance bring together role-players from a broad variety of sectors, culminating at the intersection of law, technology and policy. It is here where Ameen Jauhar positions his contribution where an overview is provided of how AI can be used to enhance legislative administrative efficiency in India. Jauhar is a firm proponent of the notion of predictive justice. Predictive justice protects people from bias. It is remarked how there is an interesting debate amongst humans, questioning whether we are envisioning algorithms on a higher pedestal than us? And if so, what do those responsibilities entail? Begin human and fallible, judges can make mistakes, but how will algorithms and the owner/designer of algorithms be held accountable. If we consider the levels of patience and sympathy we accord to judges, will this same level be accorded to algorithms?

Therefore, AI can indeed enhance legislative, administrative and other sectors' efficiency, but how will AI be held to account should something go wrong? Isabela Ferrari also engages on the topic of how AI can assist with decision-making in the legal system. She states that AI can be adopted to provide recommendations to judges, provide judgements that must be followed, and even replace human judges in some instances. Though there may be concerns that arise from AI's embeddedness in the judiciary, we can instead ask how machine learning can best be utilised to improve decision-making, in order to account for, or alleviate, potential errors in human decision-making.

Dan Shefet elaborates on the advantages of using AI to improve decision-making in the courts as based on algorithms. He asks "who judges the judges" and points out human fallibility in court orders which impact people's lives when wrongful, or biased, outcomes result from such pronouncements. He argues that although AI has been critiqued for being biased, it must be emphasised that humans are biased too. And if the processes can be improved of how data is collected, curated and embedded in an algorithmic data set, statistical calculations will only continue to improve.

AI AND LAW

Since there may not currently be legislation in place to legally mandate the design, deployment and use of AI, Gary Marchant provides and overview of soft law governance of Artificial Intelligence and the Right to Know. He argues that one of the benefits of soft law is that it fills gaps pertaining to AI governance. Soft law is also a suitable avenue for the design of guidelines and policies, since its remains agile and flexible, and can adjust according to the pace and scope of the continuous development of AI and other emerging technologies.

This approach is supported by James Sherer who presents on ethics in Artificial Intelligence and promotes a practical approach to presentation and Defence. Most of the current engagements wit AI is within the form of weak AI, since these encompass process-driven algorithms, that assist with decision-making. These are not the type that will replace or simulate humans, but they will assist with, and in some instances, replace human decision-making. These outcomes are based on the data aggregated, its curation, analyses and presentation. To promote effective regulation that will ensure quality and accurate information output, it is recommended that regulation be embedded throughout the lifecycle of algorithm development. The benefit of the lifecycle regulation is that citizens are informed of what will be done, how it will be done, and what the potential outcomes will be that affect their daily lives. The positioning of responsibility remains a key concern, but at least with a phased approach, checks and balances are embedded from early on.

Filipe Medon does warn against the harm which AI can cause to society in his presentation on civil liabilities. One of the greatest concerns of AI is its opaqueness, which is compounded by its ability to mirror and reproduce existing biases in society. He calls for more transparency of data as well as holding those to account who are responsible for designing and deploying such technologies. While on the one hand there is a call for the transparency of a system, Justice AK Sikri forewarns the growing threats to privacy due to AI. He acknowledges that the concept of privacy is very broad, and that it can be violated in many ways. It is due to these realities that there should be continuous efforts to protect the right to privacy. With AI products and services becoming ever more embedded in our daily lives, it means that we and our data become the products ourselves. It is therefore imperative to regulate data collection and management within a well-defined strategic framework.

NARRATIVE REPORT: THEME 6

AI, BIG DATA AND INNOVATION

PRESENTERS
THEME: AI, BIG DATA AND INNOVATION

JASON MARS

Professor of Computer Science at University of Michigan, Entrepreneur, Author

Transformative and disruptive implications of AI

MELANIE STUETZ

CEO IDEASCANNER, Germany

Democratizing the knowledge of successful venture capitalists (VCs) - From a "pre-flight check" for business ideas to entrepreneurial thinking

ABHISHEK GUPTA

Founder and Principal Researcher, Montreal AI Ethics Institute Machine Learning Engineer, Microsoft Chair, Standards Working Group, Green Software Foundation

A roadmap to more sustainable AI systems

BRAD MOSTERT

Developer Meetup Organiser, South Africa

AI in Small to Medium Business

MARIA PAZ HERMOSILLA

Director GobLab Adolfo Ibañez University, Chile

Algorithmic Transparency in the public sector

IBRAHIM KUSHCHU

Founding Director, TheNextMinds.com UNESCO IFAP, Member of the Information Literacy Working Group

Implications of Brain-Machine Interfaces (BMI) for "our right (not) to know"

AI, BIG DATA AND INNOVATION

This thematic area explored useful, innovative, and creative ways in which AI can be used to streamline and improve processes across a diverse representation of sectors. Six presentations from the United States of America, Canada, Chile, Germany, South Africa, and Turkey dive into both the opportunities and challenges. Jason Mars first provides an overview of the transformative and disruptive implications of AI. He takes us on a journey of how society developed across millennia and developed policies and guidelines that accommodated, shaped, and adapted to our intuitions of mores and folkways, values, and beliefs within societies.

Our policies and engagements were influenced by geographic and relational proximity. There is however a fundamental difference between pre-internet/pre-technology society and the one we experience now. Notions of proximity have shifted drastically, since though we may be a citizen of a country, living in a specific town or city, we are also global citizens and connected via the internet. Information is now moulded by local and digital mores and beliefs, and our social fabric has also adjusted. These beliefs can be manipulated, and fabric torn, and that is why public policy is of utmost importance. Media plays a role in informing policy, and it must remain a channel, managed with integrity, to communicate and develop truthful and accurate information.

AI, BIG DATA AND INNOVATION

Maria Paz Hermosilla expands on the benefits of AI especially in a public sector and argues that transparency needs to be prioritised. In the promotion of access to information, an interesting point is raised of 'significant transparency' or 'meaningful transparency'. This means basically that you do not necessarily want to make everything of a system transparent, but only those things that are important for people to know. Differentiating between what is useful to know, and what is not, may pose a challenge for regulators, public and private sectors. But it is agreed that if certain information is within the public's interest, they have the right to request and gain access.

AI as an enabler to small business development is the theme of Melanie Stuetz's presentation on "Democratizing the knowledge of successful venture capitalists: From a "pre-flight check" for business ideas to entrepreneurial thinking". The presentation reflects on Melanie and her husband, Andreas', childhood dreams and experience as entrepreneurs and pilots, which inspires their current endeavours. The importance of a pre-flight check is highlighted - not only when flying, but also went planning a start-up.

Brad Mostert also talks about how AI in small to medium businesses. It is observed that the majority of developers in the space do not have a formal computer science background but are instead highly effective problem-solvers and must also play a variety of roles within their business. But the increase in and availability of open-source software, citizens have more opportunities to gain access to and develop skills pertaining to developers. This can be referred to as the "access renaissance". But just because you have access and some skills, it does not guarantee the best possible outcome should a machine learning algorithm be implemented, it can however provide a good enough outcome. The better trained software developers are, the better able they will be to improve their own understanding and reduce inaccuracies and uncertainties.

AI, BIG DATA AND INNOVATION

Abhishek Gupta seeks to provide a roadmap to more sustainable Artificial Intelligence systems. If one understands the context of a problem, especially pertaining to AI and emerging technologies, one is better positioned to developed sustainable software. The carbon impact of AI is a topic which is explored very creatively in the presentation. Not only does this have an impact on the environment, but it brings with it a host of societal concerns. Four key recommendations are made to help guide our decisions and actions towards achieving an eco-socially responsible AI system.

And finally, the macro eco-social considerations of AI are mirrored by the micro-human considerations of AI insofar the implications of brain-machine interfaces (BMI). This is presented by Ibrahim Kushchu. To situate the context, a few definitions are provided to clarify the meaning of AI and BMI, and these are extended to the actual applications of technologies interfaces between external stimuli and the brain. These technologies provide solutions to those who require prostheses for limbs lost, it provides the ability to control external machines, but conversely, it may provide the opportunity for free will to be influenced. If AI is used in a good way, it can enhance our right to know.

NARRATIVE REPORT: THEME 7

AI AND CREATIVITY

PRESENTERS
THEME: AI AND CREATIVITY

GENE KOGAN

Artist, genekogan.com

Arts and Creative Intelligence

COLIN CLARK

Associate Director, Inclusive Design Research Centre, OCAD University

Decisions of our Own: Inclusive Design and Cooperative Ownership of Data and AI Systems

GALIT WELLNER

Tel Aviv University

Can AI Algorithms be Creative?

SUZANNE CIANI

Musician and Composer

Music, Composition and Artificial Intelligence

TRUDY BELL

Writer, Actor, Producer

AI: A Comedic Take

AI AND CREATIVITY

Five presentations from the United States of America, Canada, Jamaica, Israel dive into the creative scope of AI and the endless possibilities it contains to visualise design, compose music and test our boundaries of comedy and woke culture.

Gene Kogan gives us insight in his childhood where he enjoyed playing video games and how this inspired his interest in artificial artistry. The artificial artist concept explores notions of personhood and agency in AI, as well as experiments with computational agents that mimic life. He lists a few properties of what can be deemed an autonomous artificial artist, which includes autonomy, originality and uniqueness.

In Colin Clark's presentation he refers to the Inclusive Research Design Centre where they work to ensure that emerging policies, systems, and design practices are inclusive of the full range of human diversity and cultural participation. It is lamentable that even though there are efforts to promote inclusivity, there are still instances of discriminatory decisions made by automated systems. Minority groups - due to limited data - will also be represented less in data sets which contributes to them as being seen as outliers due to the algorithms and machine learning training regimes. A call is made for policies and regulation to ensure the inclusion of minority groups and culturally diverse communities.

AI AND CREATIVITY

Can algorithms be creative? This is the question posed by Galit Wellner. She extends this question by pondering whether they may even have imagination. What does imagination even mean? Galit takes us back to the philosophical theories on imagination by Immanuel Kant and postulates that imagination is a bridge between my perception and my understanding. She then queries what creativity means, and grounds it in notions of novelty, value and surprise. It seems viable that AI can indeed be creative, and that a model - operated by a human and content generated by an AI - may be feasible, especially if AI and humans collaborate. In this instance we can see how technology shapes us and create value, whilst we shape valuable technologies.

These instances of human and AI co-creation of artistic work is put to display by Suzanne Ciani when she expounds on music, composition and Artificial Intelligence. Ciani was a speaker at the very first TED Conference in 1984. Mandelbrot - who was talking about fractals - was at this conference too, and she was struck by the simplicity - for we all strive for simplicity in our solutions - of crystalline description of complexity. Ciani provides a demonstration of the instrument, Buchla 200e, which is a machine that uses repetition and LEDs to transmit signals to create music. A couple of patters are showcased at random to illustrate the parameters of sound and complexity as performed by modular electronic music instruments.

Trudy Bell acts out two scenarios that are indicative of the current realities pertaining to personal data collection, deanonymisation, as well as the monitoring of communication to ensure political correctness. Through these skits the (alarming) absurdities of these events are highlighted, but also inspires us to take an objective look at ourselves and find some humour amidst all these serious considerations. AI and the internet are tools that make our lives more efficient but also more complex. Essentially, it is our responsibility to manage how we interact, and react, to it.

NARRATIVE REPORT: THEME 8

YOUTH IN AI

PRESENTERS
THEME: YOUTH IN AI

TYLER JAYNES

Non-traditional bioethicist

The Question of Algorithmic Personhood and Being: Measuring the Digital World to Secure Future Inalienable Rights

JOSHUA BURGESS

Bachelor's degree in Journalism from Carimac, University of the West Indies and MSc in Sports Marketing from Birkbeck College in London, UK

Openness and Inclusivity for Disabled Communities in A New Era

PIA-MILAN GREEN

Second Year J.D. Candidate and Editor of the Journal of Technology, Law and Policy at the University of Florida Levin College of Law

Artificial Intelligence, Health and Law: A Snapshot of Emerging Legal Issues

MUKUND TRIVEDI

National Institute of Fashion Technology.

AI & Design

UFULU MARTHA-JUNIOR CHISALE

Youth Ambasador for International Centre for Information Ethics

Impact of ICTs and AI on developing nations

DARICIA WILKINSON

Clemson University/UX Researcher

Online safety in the Caribbean

YOUTH IN AI

This thematic session does not focus on how AI impacts the youth, instead, these six presentations are made by youth from the United States of America, Jamaica, South Africa, and India.

Tyler Jaynes raises the question of Algorithmic Personhood and Being. How do we measure the digital world to secure future inalienable rights? Towards answering this, Jaynes turn to science fiction to explore these emerging technologies and how they inform the way we perceive and engage with society. If engineers take inspiration from science fiction, why cannot researchers also take inspiration from it? It is argued that if we only focus on AI, we miss out on the opportunity to capture and engage with other emerging technologies, such as nano-technology. The presentation comes to a firm conclusion that we need to collaborate on definitions and terminology so as to avoid miscommunication.

Joshua Burgess prioritises openness and inclusivity for disabled communities in a new era. In this thoughtful presented, four key areas are set out for contemplation, the value and importance of AI for disabled persons, a discussion of AI tools that facilitate independent living, addressing bias and ethics in the development of AI technologies, and encouraging a multi-stakeholder approach for increased inclusiveness. Referring to the WHO statistics on people living with disabilities, specifically the blind, Burgess argues that AI can potentially break down barriers and increase accessibility.

Centering the focus on Artificial Intelligence, health and law, Pia-Milan Green provides a snapshot of emerging legal issues. It is emphasised that the Covid-19 pandemic has accelerated the integration of AI technologies in the healthcare industry. Together with this acceleration towards improving service delivery and solutions to challenges Covid-19 pose, a number of concerns also arise. These pertain to physician liability, informed consent, privacy issues and big data liability. Green states that liability in healthcare will be influenced by explainability, transparency and predictability of AI systems and explains that discourses on agency and responsibility need to be prioritised.

YOUTH IN AI

TMukund Trivedi commences the presentation from a personal reflection on design theory. Pertaining to the amalgamation of AI and design and its application in the fields of healthcare and natural resources, Trivedi argues that the process of design needs to be simplified. When AI is used to achieve simplicity, the technologies and their solutions will become more accessible, especially for people with disabilities. In addition to this, Trivedi introduces the concept that where there is water, there is literacy. To improve access to water, once will inadvertently improve access to education. AI can therefore be utilised to measure the contamination in water systems, treatment plants and sanitisation systems. It can also best recommend solutions towards improving water service delivery and the treatment of such contaminants.

The need for water provision and literacy awareness are compounded by the absolute need for ICT infrastructure, especially in developing nations. This is the call made by Ufulu Martha-Junior Chisale who focuses on the role telecommunications service providers play in ensuring people have access to affordable and functional communications networks. It is argued that both public and private sector organisations are confronted with ongoing pressures to streamline activities, nurture innovation, advance efficiency and achieve demanding organisational objectives through effective communication. Essentially this is their duty to citizens to ensure that basic needs are met, such as for example the payments of grants and programme to distribute Covid-19 vaccinations.

Daricia Wilkinson prioritises the concept of safety and what it means to be safe. Her presentation is on an integrated human-centered approach to online safety. In a study conducted in the Caribbean, it was found that a large proportion of the respondents have experienced some form of online harassment and victimisation. To address these concerns, equitable design, on- and offline deliberations and the promotion of justice must be central to the solution of how harm can be detected by AI. Wilkinson argues that despite the limitations AI pose, it can be harnessed to be an effective tool to promote online safety.

NARRATIVE REPORT: THEME 9

AI AND ACCESSIBILITY

PRESENTERS
THEME: AI AND ACCESSIBILITY

COLTON BISHOP

Google Accessibility Research

Google Camswitches Demonstration

MONICA DESAI

Facebook Accessibility

Facebook Accessibility Demonstration

ANDRIES VAN NIEKERK

Communication Manager at Non-Profit Organization: National Institute for the Deaf

International Sign Language Expert and Translator

AI AND ACCESSIBILITY

TColton Bishop provides a Google Camswitch Demonstration. When trying to drive accessibility innovation, there are needs and gaps of different user groups. How to better understand these groups and address their needs are central to any process of innovation that will drive accessibility. The cam-switches are an exciting project which has been in development for over 1.5 years. There are 50 people on the team that worked on this project 20% were volunteers, so much of the project was informed and inspired by volunteers.

Apart from the Camswitch, there are other improvements made to existing technologies, such as switch access, more support for users with impairments, such as arthritis, issues with repeated touch or painful touch, touch, switch access and voice, etc., These are big lines of research currently being worked. Trying to reach moderately impaired people. In terms of privacy, Google Camswitch is working with accessibility services, for we assume everyone using these services have disabilities, so there is a lot more sensitivity for their privacy, health data and physical data (like following a face for facial expression recognition). The gestures are used in the moment, but then discarded immediately after.

Digital literacy initiatives are promoted by Google Camswitch as well. There has been a push to make sure the entire writing and configurations of all apps are more readable, technical, etc, feature sensitivity customisation: bigger and smaller gestures to make it more intuitive. More understandable, such that anyone can use it, to make it easier. Lots of talks on standards for example on app stores. There are also incentives to support conferences and attend as many as possible to understand what the standards are. With the latest updates of Switch accessibility on Google, it will be available for download on every Android phone and on most devices and versions. On new Android devices, Camswitch will come preinstalled on all phones across the board going forward on almost all android devices.

AI AND ACCESSIBILITY

Monica Desai makes a Facebook Accessibility Demonstration. Facebook is investing much in improving accessibility. Towards achieving this they seek to get constant feedback, and then invest a lot of resources to improve on gaps. There are multiple rounds of testing the prototypes which helps in getting sentiment from users based on their experiences. However, it must be noted that Facebook treats privacy as a core consideration throughout all its projects.

The AR/VR capabilities of Facebook are intriguing, especially since it is a fact, they are producing Oculus at Facebook. This extended reality - AR, VR Mixed Reality - is a new and emerging technology, which is always evolving. Facebook is trying to work best to provide inclusive experiences, because many technologies that are needed do not exist yet. Therefore, Facebook tries to work with the disability communities, together with collaborating in partnership with developers to address the disabled communities' needs. For example, having industry best practices for XR to help guide developers to create more accessible VR apps such as the June release of Oculus v30, which will make this technology a better experience for everyone.

Facebook is also seeing lots of opportunities for development of technologies. Historical research shows how the experience can be opened to wider audiences, and how AR/VR are being leveraged. Priorities continue to engage with the perspectives of communities around the globe and these include improving and providing services, to give access to markets and information for people with disabilities.

It is extremely important to engage in regulatory and policy environments with academics, policy makers, and other sectors of societies. Facebook learns from groups representing those with disabilities, to prioritise and put pressure on companies who are not as accessible. Participating in this work is useful, especially working as a regulator. Facebook also co-founded and are still active in Teach Access, a multistakeholder initiative to work in higher education to support students before going into tertiary education.

AI AND ACCESSIBILITY

Teach Access has won multiple awards, 400+ organisations, want to see this expand beyond the USA. Teach Access and Facebook are trying to work with other companies to drive legislation in broader ecosystem, such as WWW consortium, to collaborate to improve accessibility standards and to keep the dialogue going.

Together with Teach Access there are also digital literacy programmes for the disabled, to assist them with learning about these technologies. Digital literacy skills are crucial to empower people to use the internet, we need to adapt to support people gain more access. Facebook has got Get Digital - going from basic to advanced skills - which is a digital citizen programme, such as online safety skills, have lesson plans for teachers, containing core competencies. Have partnerships with different telco operators, to teach skills, online safety, what is possible through the internet.

In terms of expanding technology, there is a requirement to have additional and strengthened audio capacities. However, with this expansion, will it increase daily use? This might imply that remote, indigenous societies, without strong broadband, will not be able to access these technologies or all its features. Facebook argues that having broadband access is foundational to using any technology, not sure if more applications will make products less accessible, without fundamental broadband connection, accessibility will not be possible regardless. Have been collaborating with partners across the globe, to bring broadband access to places in the world that have less access. Business models have been passed on to partners, to provide higher quality connection to areas with weak access. In conclusion, we should all engage with government regulators on this to improve connectivity.

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