

Book of Proceedings

28 September, 2022

University of Melbourne, Australia

#AuDIITA

About IEEE DIITA

Many areas of human activity in the 21st Century take place within cyberspace. Those excluded from cyberspace are thereby excluded from a key domain of human endeavor. Exclusion may arise from many causes, including affordability, availability, discrimination, and concern for safety.

The "Dignity, Inclusion, Identity, Trust, and Agency" (DIITA) Industry Connections Program considers causes of exclusion which can be addressed by advancing technology for humanity through standardization and related solutions.

More Information Here:

https://standards.ieee.org/industry-connections/diita/

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Open Session List #AuDIITA 2022

Dignity Inclusion, Identity, Trust and Agency

Wednesday September 28 2022

- Al Human rights in the context of social media and digital platforms & The Ethics of the use of Al for moderation of online spaces (including Metaverse)
- Ideas for potential emerging standards and regulations for Digital Inclusion, Dignity Identity Trust and Agency & Guidelines and Standards - How to make?
- Blockchain Regulations Industry based
- The Digital Rights of the Child
- OPTUS Fallout: harms to victims? Industry responses?
- Greenhouse Emissions from Cloud How to mitigate these?
- Trusted AI + Assurance
- Technical Challenges in using Data in domain specific entities for large system applications (ex: Defence software & Information systems)

Al Human rights in the context of social media and digital platforms

Session Convener: Zachary Lam & Olga Bubnova

The discussion focused on various aspects related to AI, human rights, social media, and digital platforms. Key themes that emerged from the discussion include:

- 1. Choice and Agency: Participants raised questions about the extent to which individuals have a choice in using digital platforms and the potential lack of alternatives. The normalization of social media usage and the dependence on certain platforms were highlighted.
- 2. Algorithmic Influence: The impact of algorithms on content consumption and user behavior was discussed. Concerns were raised about radicalization, cross-platform data collection, and the need for global standards to regulate algorithms and ensure transparency.
- 3. Consolidation and Regulation: The consolidation of applications and platforms was seen as a challenge for regulation due to their cross-jurisdictional nature. The need for regulation, certification, and ethical design practices for AI systems was emphasized.
- 4. Data Privacy and Transparency: Participants expressed concerns about the collection and use of personal data by tech platforms. The importance of informed decision-making, transparency in data practices, and the role of international standards, such as GDPR, were highlighted.
- 5. Social Impacts and Responsibility: Discussions touched on the potential impact of digital platforms on vulnerable communities, such as children. The responsibility of developers, regulators, and users in addressing potential harms and ensuring ethical behavior in AI systems was emphasized.
- 6. Ethical Design and Bias: The importance of designing AI systems with ethics in mind and addressing biases and discrimination was discussed. Examples were given of AI tools and voice assistants that reinforce stereotypes or lack understanding of diverse accents and voices.
- 7. Role of Standards and Regulation: The need for international standards and regulations to address AI ethics, hate speech, and privacy concerns was highlighted. The role of governments, industry, and civil society in shaping these standards was discussed.
- 8. Human Rights and Social Good: The potential for AI to reinforce human rights and social good was acknowledged, such as in health promotion and research. The discussion emphasized the need to balance the benefits and negatives of AI technology and consider the costs and burdens associated with ethical practices.

Overall, the discussion emphasized the complex and multifaceted nature of AI, human rights, and digital platforms. It highlighted the importance of proactive measures, regulation, transparency, and ongoing dialogue to address the ethical implications and societal impact of AI systems.

Ideas for potential emerging standards and regulations for Digital Inclusion, Dignity Identity Trust and Agency & Guidelines and Standards - How to make?

Session Convener: Ruth Lewis, Lucy Sparrow

The discussion explored various ideas and perspectives regarding emerging standards and regulations related to digital inclusion, dignity, identity, trust, and agency. Key points raised during the discussion include:

- 1. Multi-player Gaming Guidelines: The need to develop guidelines for multi-player gaming to ensure safety, inclusivity, and a positive user experience. The challenge lies in translating research findings from academia into practical industry guidelines.
- 2. Industry Relevance: Guidelines and standards should be useful and applicable to industry developers. Ensuring their relevance and usefulness can promote their adoption and implementation.
- 3. Safety by Design: Emphasizing the concept of "safety by design" in digital platforms and services, where safety considerations are integrated into the development process from the outset.
- 4. NFTs and Metaverse: Considering the implications of NFTs (non-fungible tokens) and the emergence of the metaverse, including issues of ownership, decentralization, and collective platform governance. The volatility and potential negative social impact of these developments were highlighted.
- 5. Role of Government and International Standards: Governments play a crucial role in shaping regulations and standards for the digital space. International standards can also help ensure safety and consistency across borders.
- 6. Unintended Consequences: Recognizing the potential unintended consequences of digital platforms and services and the need to address them proactively through guidelines and regulations.
- 7. De-platformization and Repercussions: Exploring the challenges and implications of de-platformization, where platforms restrict or remove access to certain individuals or groups. Balancing considerations of fairness, reasonable action, and material impact is crucial.
- 8. Startups and Standards: Considering the challenges faced by startups in adhering to standards and regulations. Supporting startups in meeting compliance requirements and ensuring their products and services align with established standards is important.
- 9. Broad Perspectives and Collaboration: Encouraging a broad range of stakeholders, including government officials, industry representatives, and researchers, to collaborate in developing standards and regulations. Seeking diverse perspectives and expertise can lead to more comprehensive and effective guidelines.
- 10. Financial Considerations: Addressing the financial implications for startups and smaller companies in meeting regulatory requirements. Identifying ways to provide support and resources to help them afford compliance measures is crucial.

Overall, the discussion highlighted the need for proactive guidelines and regulations to address digital inclusion, dignity, identity, trust, and agency in a rapidly evolving digital landscape. Collaboration, representation, and considerations of societal impact are vital in developing comprehensive and effective standards.

Blockchain Regulations - Industry based

Session Convener: Olga Bubnova & Tim Cara

The discussion centered around industry-based blockchain regulations and explored various considerations and use cases related to blockchain technology. Key points raised during the discussion include:

- 1. Understanding Blockchain: Attendees discussed their interpretations of blockchain, highlighting its characteristics such as blocks of servers, a ledger system, and a database that manages information. The reliance of cryptocurrencies on blockchain technology was also emphasized.
- 2. Differentiating Blockchain and DLT: The discussion highlighted the differences between blockchain and distributed ledger technology (DLT) and how they are used in various industries. Participants explored how different industries utilize blockchain technology, such as Bitcoin being used as a security, currency, and ledger for proof of work.
- 3. Need for Industry-Specific Regulations: Attendees discussed the importance of industry-specific regulations for blockchain technology. It was noted that regulations in the IT industry may differ from those in the financial sector, emphasizing the need for tailored regulations based on the specific use cases and characteristics of each industry.
- 4. Legal Perspectives on Crypto: The legal industry's view on cryptocurrencies was touched upon, with participants discussing the definition and legal implications of crypto assets.
- 5. Blockchain in Logistics and Art Industries: The potential benefits of blockchain technology in the logistics industry were explored, particularly in terms of improving service punctuality and key performance indicator (KPI) management. The use of blockchain in the art industry was also mentioned, with examples of past projects and the reasons for their lack of success.
- 6. Diverse Use Cases: Attendees reiterated that one system or set of regulations is unlikely to cover all use cases of blockchain technology. Different industries have specific requirements and considerations, necessitating tailored approaches to regulation and implementation.

Overall, the discussion highlighted the need for industry-specific regulations and considerations when implementing blockchain technology. The diverse use cases and requirements across industries emphasize the importance of flexible and adaptive approaches to regulation in order to realize the full potential of blockchain in different sectors.

The Digital Rights of the Child What are the digitals rights? How can the digital ecosystem contribute to the fulfillment of Children's rights? How can frameworks be technology neutral and future focused?

Session Convener: Daniel Child

The discussion focused on the digital rights of children and how the digital ecosystem can contribute to fulfilling these rights. Key points discussed include:

- 1. Understanding Digital Rights: Participants explored the concept of digital rights for children, emphasizing the need to protect children's rights in digital environments. Issues such as mental health, exploitation, and commercialization were highlighted as areas of concern.
- 2. Community and Refugee Perspectives: The discussion touched upon the link between digital rights and communities, particularly in the context of refugees. It was acknowledged that children may experience digital harms differently, necessitating tailored approaches to address their specific needs.
- 3. Responsibilities and Standards: The responsibility for ensuring children's digital rights was examined, with considerations given to parents, peer pressure, and educational institutions. Standards and regulations were discussed, including the California Act for protecting children and the UK's "age appropriate design code," which aim to set guidelines for child protection online.
- 4. Digital Literacy and Empowerment: The importance of digital literacy in empowering children and enabling them to navigate the digital world safely was emphasized. The discussion highlighted the need for interventions, education, and advocacy to promote critical thinking and responsible digital behavior among children.
- 5. Developer Responsibility: The role of developers in ensuring child safety online was deliberated. Participants questioned the onus on developers to create safe digital environments for children, considering factors such as playfulness, quality engagement, and the implementation of safety features like automatic face blurring.

Overall, the discussion underscored the need for technology-neutral and future-focused frameworks to protect the digital rights of children. It called for collective efforts involving parents, educators, developers, and policymakers to create a safer and more empowering digital ecosystem for children, where their rights are respected and their well-being is prioritized.

OPTUS Fallout: harms to victims? Industry responses?

Session Convener: Marc Cheong

The discussion centered around the fallout of a data leak at Optus and various related topics. Key points discussed include:

- 1. Cybersecurity Issues: The discussion touched on cybersecurity issues such as API compromises, external threats versus internal threats (including disgruntled employees), and the need to understand the type of access that was removed during the incident.
- 2. Lack of Policy: Participants highlighted the need for robust policies to address cybersecurity concerns and drive technological advancements. Examples from the energy sector, privacy concerns in the smart grid, and data retention rules were discussed as areas where policy implementation is crucial.
- 3. Data Privacy and Regulations: The conversation delved into data privacy concerns, including the retention and purging of user data, as well as the need for regulations to protect privacy rights. The European Union's General Data Protection Regulation (GDPR) and the Australian Privacy Principles were mentioned as regulatory frameworks to consider.
- 4. Examples of Good and Bad Practices: Participants shared examples of good practices, such as the secure handling of tax file numbers and credit card data, as well as concerning practices, such as unnecessary data collection by apps and the potential misuse of personal information in various contexts.
- 5. Protecting the Vulnerable: The discussion highlighted the need to protect vulnerable groups, including domestic violence survivors, individuals with low digital literacy, the elderly, and people with disabilities. Tailored responses, user-centric approaches, and the prevention of doxxing (revealing private information) were identified as important considerations.
- 6. IEEE's Role: The potential for IEEE to influence policy and contribute to the cybersecurity field was explored, with suggestions for creating reports and providing general advice to users. The importance of raising awareness, offering regulatory perspectives, and helping users understand their own data and potential risks were emphasized.

Overall, the discussion emphasized the need for comprehensive policies, effective regulations, and user-centric approaches to cybersecurity and data privacy. Protecting the vulnerable and fostering digital literacy were seen as vital components in creating a safer digital environment for all users.

Following are other sessions that were discussed; however, the report does not capture the discussions from them due to the lack of notes from these sessions:

- Greenhouse Emissions from Cloud How to mitigate these?
- Trusted AI + Assurance
- Technical Challenges in using Data in domain specific entities for large system applications (ex: Defence software & Information systems)