P09 / Democratizing Artificial Intelligence: Putting People at the Centre

Topic : SCIENCE AND TECHNOLOGY POLICY

Chair : Sushant Kumar (Jindal School of Government and Public Policy)

Second Chair : Joyeeta Dey (Manipal University)

GENERAL OBJECTIVES, RESEARCH QUESTIONS AND SCIENTIFIC RELEVANCE

Regulation has historically played catch-up with emerging technologies. Awareness is often raised post-facto and in a manner of dealing with risks and benefits emanating from the application of the technology to society at large (Jasanoff 1997, 2016; Law & McCall 2024). The promise of technology alleviating developmental problems often ends up exacerbating them, such as in the case of the Aadhar project in India – envisaged to uniquely identify beneficiaries of transfer services, it has instead resulted in exclusionary effects (Khera 2017). This case in point proves, technology widens the chasms of social, political, and economic inequities, especially for the marginalized, in the name of whom these technological interventions are justified in the first place (Benjamin 2019; Barocas et al., 2017; Moran-Thomas 2020).

The story of development and deployment of Artificial Intelligence (AI) technologies in various walks of life has arguably not been much different. As a technology largely accrued to the future and increasingly permeating the present, AI is often coupled with spectacular promises of both saving mankind as much as posing the risk of rendering it extinct (Future of Life Institute 2023, Stilgoe 2020). Hence, questions of understanding, regulating, and harnessing the technology becomes a critical policy issue.

This panel will dive into various policy concerns surrounding AI with an aim to put human developmental objectives at the center of the conversation.

Scientific relevance

The current swathe of AI technologies has proven to be discriminating on grounds of race, class, gender, and even zip codes, a phenomenon popularly known as algorithmic bias (Akter et al., 2021, Stilgoe 2020, Future of Life Institute 2023). They have been proven to further systemic biases encoded in the historical data they're trained on (Nazer et al., 2023, Gaonkar et al., 2020). Critically analyzing the design, development and deployment of AI technologies across the full stack of this technology, upstream and downstream, and opening this discussion for a wider discussion can help enrich the design of these technologies by making them more inclusive, equitable and accessible and thus enriching democratic values.

Research questions

1. How are jurisdictions over the world dealing with evolving AI technology?

2. How can regulatory frameworks be designed to proactively manage the societal risks and benefits of AI-based technologies to ensure equitable outcomes?

3. How can historical cases of technological regulation be deployed to inform the development of effective policies for the governance of AI technologies?

4. How are narratives of hype around the technology influencing policymaking?

5. How are Governments and the private sector negotiating authority and legitimacy over regulatory aspects of AI technology?

6. How does geopolitics influence the governance of AI in India and other jurisdictions?

CALL FOR PAPERS

The current swathe of AI technologies has proven to be discriminating on grounds of race, class, gender, and even zip codes, a phenomenon popularly known as algorithmic bias. They have been proven to further systemic biases encoded in the historical data they're trained on. Historically, regulation has played catch-up with emerging technologies. Awareness is often raised post-facto and in a manner of dealing with risks and benefits emanating from the application of the technology to society at large. The promise of technology alleviating developmental problems often ends up exacerbating them, such as in the case of the

Aadhar project – envisaged to uniquely identify beneficiaries of transfer services, it has instead resulted in exclusionary effects. This case in point proves, technology widens the chasms of social, political, and economic inequities, especially for the marginalized, in the name of whom these technological interventions are justified in the first place

Given this context, critically analyzing the design, development and deployment of AI technologies across the full stack of this technology, upstream and downstream, and opening this discussion for a wider discussion can help enrich the design of these technologies by making them more inclusive, equitable and accessible and thus enriching democratic values.

This panel will dive into various policy concerns surrounding AI with an aim to put concerns of justice, equity, and access at the center of the conversation.

We invite contributions from a range of fields, practices, and individuals who speak to to one or more of the following research questions:

Research questions

1. How are jurisdictions over the world dealing with evolving AI technology?
2. How can regulatory frameworks be designed to proactively manage the societal risks and benefits of AI-based technologies to ensure equitable outcomes?
3. How can historical cases of technological regulation be deployed to inform the development of effective policies for the governance of AI technologies?
4. How are narratives of hype around the technology influencing policymaking?
5. How are Governments and the private sector negotiating authority and legitimacy over regulatory aspects of AI technology?
6. How does geopolitics influence the governance of AI in India and other jurisdictions?

Types of papers expected, including but not limited to:

1. Anticipatory governance of AI technologies
2. Implications for caste, class, gender, linguistic, technological and regional divides
3. Use cases from policy sectors including but not limited to health, education, urban governance
4. Narratives, discourse, framing and communication
5. Geopolitics and AI nationalisms

Please submit a paper title and abstract (200-300 words) by the 31st of January, 2025 to the ICPP7 conference site. We look forward to receiving your submissions and engaging in lively discussions about regulating and democratizing Aritificial Intelligence technologies.

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Session 1

Thursday, July 3rd 08:00 to 10:00 (A4)

Biometric verification for education administration

Joyeeta Dey (Manipal University)

Sushant Kumar (Jindal School of Government and Public Policy)

Across the world biometric systems are increasingly being adopted by States like India, Nigeria, United States and UAE,for more ‘secure, accurate, efficient’ governance. In the domain of education administration as well, biometric systems have several use cases ranging from monitoring teacher attendance to ascertaining ‘real’ numbers in terms of student enrolment by weeding out false or duplicate identity claims. In this paper I will go over prominent use cases across the world, proceeding to then theorise both the discourse they are embedded in as well as their materiality using concepts from Science and Technology Studies.

Science and Technology studies serves as an especially fruitful conceptual toolbox to navigate understanding of these processes. I will tracing how the idea of ‘truth’ is attached to the informationalised body and then this bio-information isused as a state sanctioned sorting deviceto distribute benefits/rewards to the ‘deserving’. Infrastructure surrounding the public delivery of services is built on the affordance of certainty and the claim of immunity to proxies this technology provides.

It is also useful to view it as an obligatory passing point - both for the state and the citizen, alongside tech companies, civil society and other intermediaries who form an assemblage to produce and stabilise this infrastructure of truth making.In addition, each actor in this assemblage of the socio-technical artifact has diverse meanings and narratives about it, some overlapping some discrete, some even contradictory. Such socio-technical artifacts embody state making projects, holding a special significance for developing and postcolonial societies. In the latter contexts there is a tendency to slide into uncritical triumphalism with regard to participation in modernity through technological adoption. Therefore, in these paper I will also critically read these narratives to evaluate whose perspectives are adopted and whose get marginalised, querying for questions of state surveillance, privacy and exclusion.

(Virtual) Effective Implementation of Healthcare AI: Lessons from Six Frontier Technology Pilots in Developing Contexts

Christopher Moore (University College London, University of London)

As the world of innovative technologies grows to address disparities in health systems, AI-based health applications are being increasingly employed in new contexts. Technologies such as AI-based health tools and chatbots may support gaps in resources and expertise with the aim to increase access to reliable and high-quality healthcare services. Their use is continuing to expand—particularly due to the COVID-19 pandemic—from global minority to now global majority contexts, such as in LMICs.

With this growth comes a broad range of challenges and considerations for effective use, from access to affordable technologies to trustworthiness in new, non-traditional systems. Given the lack of evaluative studies to support decision-making surrounding AI and Machine-Learning use in low-resourced settings, this research explores six pilots that utilized AI for health in developing contexts to identify any differences or commonalities in their design and delivery and what lessons could be gleaned for wider adoption and implementation of AI for health tools in the developing world.

This research looked at six pilots delivered by the UK-based Frontier Technologies Hub, through interviews

with key actors within the pilots, including pioneers, technologists and innovation coaches. All included pilot programs used AI in some capacity to accomplish health goals in developing contexts, highlighting the differences or commonalities in the program designs and delivery and what lessons could be gleaned for wider adoption and implementation of AI for health tools in the developing world. The paper discusses the results from the interviews with key actors and the actionable insights into how AI tools can be more effectively designed, implemented, and scaled for sustainable health outcomes in developing regions.

We highlight here that the research in this topic is at a systematic level or applies Western ideas and research to developing contexts and questions. There is a clear gap in the literature for analysis on real-world attempts to utilise and integrate AI technologies in healthcare systems within developing contexts. This research supports future innovators to develop their own plans or pilots for similar schemes as well as begin to build a research base for practical implementation of AI in these contexts that is currently not present. By synthesizing lessons learned, this paper aims to empower global health stakeholders—policymakers, NGOs, and tech innovators—with strategies to bridge the gap between technological promise and practical impact.

The Need for AI Regulation and Ethical Oversight

Akansha Yadav (O.P. Jindal Global University)

Aditya Agrawal (OP Jindal Global University)

Artificial Intelligence (AI) has rapidly evolved from a futuristic concept into an indispensable tool in various industries, reshaping economies, governance, and everyday life. As its influence expands, prominent figures in the technology sector, including Sundar Pichai, Elon Musk, and Brad Smith, have called for proactive regulation to mitigate its risks. AI-powered applications such as deep fakes, facial recognition, and autonomous systems pose significant threats to public safety, privacy, and democratic institutions. The debate over AI regulation is multifaceted, encompassing ethical, legal, and geopolitical concerns.

A central question in the AI discourse is whether AI should be regulated at all, and if so, who should oversee its governance? While proponents of regulation argue that unchecked AI development could lead to existential threats—including the misuse of autonomous weapons and AI-driven disinformation campaigns—opponents caution against premature regulatory intervention that could stifle innovation. Azamat Abdoullaev contends that AI, as a fundamental technology, should remain free from early-stage regulations, as improper oversight may hinder its growth. However, figures like Stephen Hawking and Bill Gates warn that an unregulated AI landscape could lead to disastrous consequences, emphasizing the urgent need for ethical and legal safeguards. The regulatory dilemma presents two contrasting approaches: state-imposed regulation versus self-regulation by industry players. Government-led regulations offer a structured framework to ensure accountability and fairness, but excessive control may impede technological progress and lead to uneven global competitiveness. In contrast, self-regulation relies on corporate responsibility, which, while fostering innovation, risks creating an environment where ethical concerns are overlooked in the pursuit of market dominance. A balanced approach, incorporating mandatory ethical standards and sector-specific oversight, is crucial to navigating AI governance effectively.

India's stance on AI regulation, as outlined in NITI Aayog's ‘National Strategy for Artificial Intelligence’ and the 2020 Working Document on Responsible AI, underscores the need for a flexible, risk-based regulatory framework. The proposed oversight body, comprising experts from various disciplines, aims to develop sector-specific guidelines, ensuring AI deployment aligns with national interests and ethical considerations. However, the absence of a comprehensive AI-specific legal framework in India, as noted by legal scholars, highlights gaps in policy execution and enforcement. Internationally, efforts such as the European Union's Digital Services Act (DSA) and Digital Markets Act (DMA)exemplify legislative attempts to regulate AI-driven platforms, ensuring accountability, transparency, and user rights protection. However, the lack of global consensus remains a significant hurdle, as divergent regulatory frameworks across countries create inconsistencies in AI governance.

This research paper will examine the need for AI regulation, ethical dilemmas, privacy concerns, and security threats posed by unregulated AI. Secondly we have discussed the key stakeholder perspectives, analysis of views from technology leaders, policymakers, legal scholars, and AI ethicists. We have also discussed the global regulatory approaches for which we have included case studies from the EU, the US, and India, exploring existing and proposed AI governance models. Authors have also tried to address the challenges in AI regulation and have attempted to provide the future roadmap for AI governance for a globally coordinated regulatory framework, emphasizing transparency, accountability, and ethical AI development.

Keywords: Artificial Intelligence, Humanised AI, Democracy, Public Policy, Responsible AI.

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Session 2

Friday, July 4th 08:00 to 10:00 (D2)

Towards Responsible AI in India: A Strategic Framework for Robust Governance and Impact Assessment of AI Systems

Pranjal Khare (O.P. Jindal Global University)

Paridhi Sharma (OP Jindal Global University, Sonipat)

Towards Responsible AI in India: A Strategic Framework for Robust Governance and Impact Assessment of AI Systems

This paper will delve into the transformative impact of Artificial Intelligence (AI) across various sectors while highlighting the ethical, legal, and social challenges arising from its rapid advancement. AI has demonstrated immense potential in revolutionising industries, enhancing efficiency, and contributing to societal progress. However, these benefits also raise significant concerns about fairness, accountability, transparency, privacy, security, and adherence to human-centric values. Addressing these issues is crucial to ensuring that AI development and deployment align with the principles of Responsible AI.

To facilitate the responsible governance of AI technologies, it is imperative to establish a comprehensive and structured "AI Impact Assessment Mechanism" tailored to the Indian context. This mechanism would serve as a regulatory and evaluative framework to systematically assess AI systems and applications, ensuring they conform to ethical standards, legal mandates, and policy guidelines. By implementing such an assessment mechanism, policymakers and regulatory authorities can gain a thorough understanding of the AI ecosystem in India. This will aid in mitigating potential risks while maximising AI's benefits in a controlled and accountable manner.

In recent years, India has taken significant steps toward AI governance, particularly through the formulation of the National Strategy on AI (2018) and its adherence to Responsible AI principles endorsed by global organizations such as the Organisation for Economic Co-operation and Development (OECD) and the United Nations Educational, Scientific and Cultural Organization (UNESCO). These policy frameworks emphasize the necessity of fairness, inclusivity, and ethical considerations in AI applications. Despite these efforts, the absence of a structured impact assessment mechanism leaves a regulatory gap that must be addressed to ensure AI technologies are deployed in a manner that aligns with national and international best practices.

The proposed "AI Impact Assessment Mechanism" aims to bridge this gap by integrating a multi-dimensional evaluation process that scrutinizes AI applications through legal, ethical, and societal lenses. The mechanism would involve key stakeholders, including government agencies, AI developers, industry experts, and civil society organizations, to create a balanced and inclusive approach toward AI governance. This framework would facilitate risk assessment, regulatory compliance checks, and continuous monitoring of AI systems to ensure they adhere to India's existing legal framework and ethical norms.

Additionally, this assessment model would empower the government with a structured oversight mechanism that fosters trust and accountability in AI deployment. By enforcing compliance with ethical AI principles, it would contribute to reducing bias, preventing misuse, and promoting transparency in AI-driven decision-making processes. The AI Impact Assessment Mechanism would also enhance public confidence in AI technologies by ensuring their implementation prioritizes social well-being and adheres to human rights standards.

Keywords: - Artificial Intelligence; Assessment; Co-operation and Development (OECD); United Nations Educational, Scientific and Cultural Organization (UNESCO)

(Virtual) Understanding the democratisation of AI governance as a complex adaptive process

Naresh Singh (Jindal School of Government and Public Policy)

This paper argues that the governance and regulation of AI must be conceptualized as a complex adaptive systems (CAS) process, if its rapid technological evolution and equally rapid spread in all strata of society, can be sensibly guided to the greater good of the greatest number of people. CAS theory studies systems made up of interconnected dynamic components that adapt and evolve in response to changes in the environment. This is exactly the kind of situation that is playing out with the coevolution of AI technological growth and its interaction with society. As such it is proposed that this kind of thinking can help create governance arrangements that are resilient, participatory and capable of evolving to meet human needs as these also continue to evolve.

After a review of existing AI regulations in selected countries, the paper will show how CAS principles such as coevolution, adaptation, self-organization, emergence, non-linearity, and decision making in the face of uncertainty, can help democratize AI governance. To make this operational, processes and mechanisms such as participatory feedback mechanisms, AI monitoring systems, inclusion of diverse agents in the social system including marginalized voices, crowd sourcing platforms to foster emergent collaboration and use of agile governance structures to deal with non-linear unanticipated impacts will be discussed.

The paper then considers concrete recommendations for policy makers. These include the creation of adaptive and iterative policy processes which evolve in response to AI development and feedback from the public. To facilitate this the use of policy thinktanks and regulatory sandboxes can be used to test run regulations before broader deployment. Learning must become the key management strategy and be supported by open transparent and accountable feedback systems which create trust while protecting privacy.

India is the first country to have attempted to articulate this approach in a modest manner so far and the paper will conclude with a brief review of the approach as an illustration.

AI for All? Bridging Gender Gaps in the Age of Democratized AI

Sunidhi Setia (OP Jindal Global University, Jindal Global Law School)

Aditya Agrawal (OP Jindal Global University)

With Large Language Models or LLMs and Generative AI, such as ChatGPT and Deepseek, taking over the world, the question of internet/AI governance becomes vital. Since AI models are trained on existing literature, they are implicitly and unsuspectingly trained on biased material creating critical issues of gender imbalance. Therefore, in order to have an inclusive and equitable technological system, it becomes important to accept that there exist an implicit or unintentional bias. To understand the tech gender bias, the translation from one language to another of gender neutral terms is noteworthy. The results will show that the Language processing models are associating the certain professions, behaviours or roles with specific genders. The example reinforces the programmers' biases or skewed patterns inflicted on machines while feeding training data. The huge diversity in the answers to series of sensitive geo-political questions posted to both famous ChatGPT and newly launched Deepseek by the news platform inshorts under insights by inshorts on January 31, 2025 is yet another recent depiction of transfer of human biases to machine through data transfer. Shifting from the abstract theoretical implementation of AI, the paper is advocating inclusive, equitable and diverse approach for AI creation and implementation. With feminist analysis of current AI policies the research seeks to redefine the intersection of technology, gender and society. While highlighting the advent of school of Feminist Artificial Intelligence the paper critically explore the historical exclusion of women's knowledge and perspective in scientific discourse. Promoting Alison Adam's critique of AI, the authors doesn't promote FAI as an alternate but as a means to well-informed and inclusive AI. Signifying the trajectory and progression for an inclusive AI, the research focuses on importance of Models, design and data collection that can be very well envisaged in progression of conceptual framework to tangible applications.

The research centrally argue for development of AI technologies that stands as a liberating force representing feminist theory. With AI slowly seeping into all the major sectors around the world from healthcare to legal aid to pharma to food industry, it's imperative to calculate the cost of tech discrimination to society as whole. The authors realising the risk associated with such biases provides a three pronged feminist approach to the AI development and implementation. This research through a performative model

of awareness, inclusion and regulation stresses for a more democratic policy making to bridge the gendered gap. Being cognizant of the importance of broader initiatives and collective solidarity to mitigate such discrimination the research suggests mandatory tech auditing and sensitization to have an inclusive AI transformation.