Qwen

From Manifesto to Metropolis: Operationalizing Viva-La Evolution's Rights-First Cybernetic Governance

Translating Core Principles into Accessible Policy and Public Guarantees

The 'Viva-La: Evolution!' framework establishes its foundational strength through a strategic linguistic and conceptual framing that prioritizes human rights over technological capability . Its core directive is to translate abstract cybernetic mechanisms—such as ecological safety polytopes, Karma ledgers, and BCI safety ceilings—into tangible civic guarantees that resonate with public concerns about autonomy, surveillance, and environmental justice . This translation process is paramount, as community surveys indicate that public ambivalence toward emerging technologies stems less from a lack of understanding of the technology itself and more from deep-seated fears about control, identity, and fairness [39]. The framework's success hinges on converting these fears into confidence by anchoring its proposals within the established discourse of "neurorights," which encompasses mental privacy, cognitive liberty, and mental integrity [15] [60]. By doing so, it reframes the debate from one of speculative science fiction to one of concrete human rights protection, a shift that aligns with growing public demand for accountability in an age of pervasive neurotechnology and data processing [5] [9].

The central mechanism for this translation is the clear dichotomy between the "inner domain" of thought and the "outer domain" of physical action . This binary simplifies complex governance challenges into a comprehensible set of rules for the public: your thoughts, feelings, and dreams are inviolably off-limits to any form of governance or scoring; only your measurable physical impacts on shared environments are subject to regulation . This principle directly counters activist campaigns against covert neuro-abuse and surveillance by establishing an absolute prohibition on using brain activity data to infer mental states for the purpose of granting or revoking external permissions [13] [14]. For example, instead of discussing the mathematical properties of convex optimization problems that define "ecological safety polytopes," policymakers can communicate the concept as a set of non-negotiable "environmental guardrails" [86]. A plain-language

guarantee would be, "The city's water management system cannot operate in a way that increases lead levels in our drinking water above the EPA limit, no matter what." Similarly, the "Karma ledger" becomes a transparent system of environmental accounting where citizens and communities track their contributions to harm or repair in air, water, soil, and biodiversity, using only verifiable scientific data [53] [55]. This moves beyond abstract metrics to tangible outcomes, such as cleaner air leading to fewer asthma attacks or safer streets resulting from optimized traffic flows managed by neuromorphic intelligence .

To operationalize these principles, several key policy guarantees must be established. First, "absolute neurorights" require a hard legal "shell" around the person, ensuring that mental privacy, cognitive liberty, and identity are treated as fundamental protections . This means no entity—government, employer, or platform—can read, predict, or manipulate brain activity without explicit, informed, and revocable consent [38]. Current data protection laws like GDPR are insufficient because they were not designed to cover the unique sensitivity of neural data, which is capable of revealing an individual's deepest thoughts and intentions [5] [61]. Therefore, stronger legal frameworks are needed. Second, the principle of "no coercive uptake" must be codified into law, explicitly forbidding any condition of employment, insurance coverage, or access to basic services from being contingent upon the use of cybernetic augmentation . Refusal to augment must carry zero penalty for core civil rights. Third, a "symmetry between augmented and non-augmented citizens" must be legally mandated, prohibiting both discrimination against those who opt out and persecution of those who opt in . These guarantees treat enhancement as deeply personal and fully protected, akin to religious belief or political affiliation, thereby preventing a new "augmentation civil war" .

The Biocompatibility Index (BCI) with a hard 0.3 ceiling serves as a powerful, concrete example of translating a technical specification into a public health guarantee . Instead of leaving safety to the discretion of manufacturers or the judgment of users, this index mandates that any BCI or neuromorphic device must automatically throttle or shut down if it pushes inflammation, heart-rate variability, or neural coordination into dangerous zones . This feature shifts the burden of risk management from the individual to the manufacturer, ensuring a baseline level of safety regardless of user knowledge or consent agreements, which have been criticized for being predatory or unclear [88]. Such a mandate is analogous to existing safety standards for automobiles or medical devices, where performance is constrained by non-negotiable thresholds to protect the public. By focusing on these types of tangible, rights-first guarantees, the 'Viva-La: Evolution!' framework provides a clear blueprint for responsible innovation. It gives citizens a language and a model to demand a version of cybernetics that strengthens democracy

and protects the planet, rather than serving as a tool for domination [50] [84]. The predictable future outlined in the manifesto—a gradual shift from fear to acceptance—is contingent on the consistent application of these principles, turning abstract promises into enforceable rights and visible benefits .

Pathways for Public Adoption Through Hyper-Transparent Pilots and Community Co-Design

Building public trust is the most critical prerequisite for the successful adoption of any cybernetic governance framework, a lesson learned from the backlash faced by many smart-city and surveillance projects that were perceived as imposed without sufficient local consent [39] [63]. The 'Viva-La: Evolution!' framework addresses this challenge head-on by proposing a phased, community-led implementation strategy centered on near-term, hyper-transparent pilot applications in specific micro-neighborhoods, such as those proposed for Phoenix . This approach is designed to move beyond theoretical debates and demonstrate tangible, localized benefits before seeking broader scale [3]. The goal of these pilots is not merely to test the underlying technology but to build social capital, foster civic participation, and prove that cybernetics can function as a shared public good for environmental and health improvement, rather than an occupying force [2] [76]. Success will be measured by community health outcomes and levels of public satisfaction, not just by technical benchmarks [4].

The design of these pilot programs must be rooted in radical transparency and co-creation. All data generated, all decision-making algorithms, and all performance metrics must be made publicly available in real-time through open-access dashboards [72]. This allows for independent audits by community members, researchers, and watchdog organizations, addressing a core concern among digital rights advocates about opaque, unaccountable systems [2]. The selection of pilot neighborhoods should involve grassroots organizations and prioritize communities that have historically borne a disproportionate burden of environmental hazards and have expressed interest in collaborative solutions [65]. Involving residents in the co-design of governance rules ensures that the systems are tailored to local needs and values, fostering a sense of ownership and legitimacy that top-down mandates inevitably lack [10]. This participatory process transforms citizens from passive subjects into active stewards of their own environment, a crucial step in legitimizing the integration of neuromorphic intelligence and cybernetic systems into daily life [54].

Central to this adoption pathway is the establishment of formal community veto powers. The framework must embed mechanisms that allow local governments and community assemblies to approve or reject high-risk deployments, a concept with historical precedent in Sweden's decentralized democracy and modern relevance in local opposition to large-scale infrastructure projects [30] [41]. This power must be more than symbolic; it requires standing guarantees that opting out of a pilot program never results in a downgrade of core civil or social rights, reinforcing the principle of "zero penalty for refusal" . Furthermore, the pilots must include clear exit strategies and robust appeals processes for participants who wish to withdraw at any time [81]. This reversibility is essential for building trust, as it prevents any group from feeling cornered into a "fight or submit" dynamic that could otherwise trigger resentment and resistance [88]. The Errority-style learning loops mentioned in the framework provide a model for how mistakes can be used to tighten safety protocols, not to increase control, creating a feedback loop that continuously improves the system based on community experience and oversight .

The following table outlines the key components of a hyper-transparent pilot program based on the 'Viva-La: Evolution!' principles:

Component	Description	Rationale
Hyper-Transparency Portal	A publicly accessible, real-time dashboard displaying all collected data (e.g., pollution levels, energy use), algorithmic logic, performance metrics, and error logs [72].	To enable independent verification, build public trust, and prevent the use of opaque, proprietary systems [2].
Community Co-Design Council	A multi-stakeholder body including residents, tribal representatives, scientists, and civil society groups tasked with defining project goals, metrics, and rules of engagement [10].	To ensure the system is tailored to local needs, fosters a sense of ownership, and legitimates the deployment through participatory governance [78].
Formal Community Veto Power	A legally recognized right for the community assembly or local government to approve or reject specific deployments or the continuation of the pilot program [30] [41].	To empower local self-government and prevent imposition of technology without local consent, reducing the risk of backlash [39].
Reversible Participation	Clear, documented, and easily executable pathways for individuals and communities to opt-out of the pilot at any time without penalty [88].	To uphold the principle of voluntary participation and prevent coercion, making the program genuinely optional .
Independent Oversight Board	An impartial body of experts (e.g., ethicists, engineers, legal scholars) not affiliated with the implementing entities to review operations, handle grievances, and report findings to the public [81].	To provide external accountability and serve as a trusted arbiter in cases of dispute or malfunction.

By implementing these measures, the pilots in places like Phoenix can serve as living laboratories for democratic innovation. They provide a space to test whether ecological Karma gates and safety polytopes actually reduce harm without disproportionately burdening marginalized groups—a major concern for both climate-justice and digital-rights movements [52] [65]. Only after these pilots have produced verifiable data on environmental and health improvements, undergone rigorous public debate, and had

their safeguards refined through community feedback should the conversation shift toward scaling the framework to other cities, states, or tribal jurisdictions [66]. This step-wise pattern, mirroring the desires of communities for education, participation, and proof before scale, is the most viable pathway to achieving broad-based public adoption [44].

Ensuring Internal Coherence Across Diverse Contexts: Medical, Workplace, and Urban Governance

For the 'Viva-La: Evolution!' framework to be credible, its principles must demonstrate internal coherence and withstand stress-testing across diverse real-world contexts. The manifesto's vision relies on the unwavering application of its core tenets—absolute neurorights, voluntary participation, and symmetry between augmented and non-augmented citizens—in every conceivable scenario, from medical treatment to urban planning and workplace dynamics . Any perceived exception or loophole would immediately undermine public trust and expose the framework to accusations of being a paternalistic or selectively enforced system. The analysis of potential conflicts reveals that while the principles are robust, their practical application requires careful policy design to prevent subtle forms of coercion and ensure equitable outcomes.

In the medical context, the principle of "voluntary participation" faces its most significant challenge. A patient suffering from a debilitating neurological condition might feel immense pressure to accept a therapeutic BCI if it offers a substantial improvement in quality of life, even if it involves sharing sensitive neural data. This creates a potential conflict between the desire for treatment and the right to refuse augmentation. The framework's "no coercive uptake" rule must be tested here to ensure it holds absolute weight. The guarantee must be legally enshrined that refusal to undergo a therapeutic cybernetic procedure can never result in the denial of other essential healthcare services, a reduction in civil rights, or negative consequences in any other aspect of life [81]. This aligns with ethical principles in clinical trial research, which emphasize that participation should be free from any element of coercion or undue influence [88]. The distinction between therapeutic intervention and enhancement must be carefully drawn, with the highest standards of consent and the strongest opt-out guarantees applying to all interventions involving neural data.

The workplace presents another critical test case. The manifesto clearly states that no employer may force cybernetics as a condition for work . However, enforcement of this

rule is fraught with complexity. A company might not mandate a BCI outright but could offer significant financial incentives, career advancement opportunities, or exclusive perks to employees who voluntarily opt-in. This creates a "de facto" coercion that effectively undermines the spirit of the rule. To address this, policy must go beyond a simple prohibition to regulate such inducements. Potential regulatory measures could include capping the value of non-essential perks tied to augmentation, requiring that promotions and salary increases be based solely on demonstrated job performance metrics unrelated to BCI use, and mandating that all information about the risks and implications of augmentation be provided by an independent third party, not the employer. The goal is to ensure that the choice to augment remains a truly personal one, free from the economic pressures that could make refusal untenable for some workers.

Finally, the framework's ecological accountability mechanisms, particularly the Karma ledger, must be stress-tested for their potential to create new forms of inequity. If not carefully designed, a system that scores communities based on their environmental impact could disproportionately penalize low-income or marginalized neighborhoods that may already face pre-existing environmental burdens [65]. This could lead to a situation where these communities lose access to resources or opportunities as a consequence of systemic factors outside their immediate control, exacerbating existing inequalities. To prevent this, the framework must incorporate strong equity safeguards. This could involve weighted thresholds that account for historical and current environmental burdens, providing additional resources and support for communities with negative ecological scores to engage in restorative projects rather than simply punishing them, and basing decisions on long-term trends rather than short-term fluctuations [52]. Restorative justice, a core principle of the framework, must replace permanent caste-like status [74]. Negative ecological scores should lead to temporary role downgrades (e.g., limited access to certain high-impact systems) coupled with concrete, supported paths to repair the harm, such as funding habitat restoration or participating in cleanup efforts [75]. Basic civil rights, however, must never depend on these scores. By proactively addressing these potential points of failure, the 'Viva-La: Evolution!' framework can maintain its internal consistency and present a coherent, trustworthy vision for the future of cybernetic governance.

The Legal and Regulatory Architecture for Neurorights and Ecological Accountability

The transition of the 'Viva-La: Evolution!' framework from a visionary manifesto to a functional governance model necessitates the construction of a robust legal and regulatory architecture. This architecture must be built upon two pillars: the first is the creation of a strong legal foundation for neurorights, and the second is the development of enforceable mechanisms for ecological accountability. Currently, the United States lacks a federal civil right to mental privacy, and the U.S. Supreme Court has indicated that the Constitution does not contain such a right [69]. Existing federal health privacy laws like HIPAA may also be insufficient, as they primarily apply to traditional healthcare contexts and may not cover sensitive neural data generated by recreational or educational BCIs [89]. This legal vacuum underscores the urgent need for new legislative action to protect individuals from the erosion of mental privacy driven by rapid advances in neurotechnology [35].

The most immediate and actionable step is to expand existing consumer privacy laws at the state level. California's amended Consumer Privacy Act (CCPA) and Colorado's amended Consumer Protection Act (CPA) represent pioneering efforts, as both have been updated to explicitly include 'neural data' in their definitions [88] [89]. The Colorado CPA became the first comprehensive U.S. law to do so, defining neural data as information generated by measuring the activity of the central or peripheral nervous system via a linked device [89]. Building on these models, the 'Viva-La' framework should advocate for even stronger protections, such as those embodied in Minnesota's Neurodata Bill. This bill takes a more precautionary approach by not providing a specific definition for neural data and instead mandating an independent notice and separate consent for each intended use and for sharing data with any third party [89]. This directly confronts the challenge of "dynamic consent" in BCI applications, where much of the generated data is processed collaterally without the user's full knowledge, leading to what has been termed "involuntary disclosure" [89]. Such legislation would establish a legal basis for treating neural data as uniquely sensitive, a principle that international bodies like UNESCO have begun to recommend [45] [67].

To create the hard "shell" around the person envisioned in the manifesto, neurorights may eventually need to be enshrined constitutionally, either at the state or federal level [38]. Chile's initiative to pioneer neurorights legislation provides a global model for how such rights can be formally integrated into national legal systems [76]. Constitutional protection would make these rights more difficult to erode through administrative or

legislative changes, providing a durable safeguard against future abuses. International human rights approaches, which increasingly frame the protection of mental privacy as a core component of dignity and freedom, provide a strong normative foundation for this effort [42] [79]. The table below compares the approaches taken by recent U.S. state laws, highlighting areas for strengthening the legal framework.

State / Jurisdiction	Key Provision on Neural Data	Strengths	Weaknesses / Gaps
California (CCPA)	Explicitly protects neural data but crucially excludes data inferred from non-neural sources.	Expands the scope of a major state privacy law; provides clarity on exclusion of inferred data.	The exclusion of inferred data may leave a significant gap in protection, as much valuable insight comes from analyzing patterns across multiple data types.
Colorado (CPA)	Became the first comprehensive U.S. law to explicitly protect 'neural data', defined as measurement from a device-linked nervous system.	Establishes a clear, proactive legal standard for a major jurisdiction.	Still relies on static consent models that are ill-suited for the dynamic nature of BCI data processing.
Minnesota (Proposed Bill)	Does not define neural data but mandates separate, independent consent for each use and sharing of data with third parties.	Embraces a precautionary, dynamic consent model that better fits the realities of BCI technology.	As a proposed bill, its provisions are not yet law and face legislative hurdles.

On the second pillar, ecological accountability, the "Karma ledger" functions as a metaphor for a verifiable, transparent system of environmental accounting that must be grounded in statutory law [55]. This requires clear legal definitions for the metrics tracked (e.g., emissions, waste, resource depletion), public reporting mandates, and, most critically, the establishment of enforceable consequences tied to these metrics. Regulations could be developed to tie access to operate high-impact systems—such as PFAS treatment plants, swarms of repair drones, or advanced energy grids—to a positive environmental performance score maintained on a public ledger [53]. This aligns with corporate social responsibility trends that increasingly demand environmental accountability [55]. The legal framework must also codify the principle of restorative justice, ensuring that negative scores lead to remediation and repair, not permanent disenfranchisement. This would require creating dedicated funds or programs to support community-led environmental restoration projects, turning the punitive aspect of the ledger into a constructive, reparative one. Ultimately, the legal architecture must be holistic, integrating neurorights protections with environmental governance to ensure that as we develop tools to interface with our minds and environments, we simultaneously strengthen the fundamental rights that protect us from their misuse.

Engaging Stakeholders with Sovereignty: Integrating Indigenous Data Governance

A critical and non-negotiable element for the successful and ethical implementation of the 'Viva-La: Evolution!' framework is the deep and respectful engagement with Tribal Nations, grounded in the recognition of their inherent sovereignty and the principle of Indigenous Data Sovereignty (IDS). The framework's emphasis on community co-design and local veto powers is particularly vital when working with Native nations, whose historical experiences with research and data collection have often involved exploitation, misrepresentation, and a lack of control [10]. Ignoring IDS would render the entire framework illegitimate and potentially harmful in tribal contexts, undermining its stated goals of justice and consent. The path forward requires moving beyond consultation to genuine partnership, where tribal nations exercise authority over the data generated within their territories.

Indigenous Data Sovereignty is defined as the inherent right of Indigenous peoples and tribes to govern the collection, ownership, and application of their own data [10]. This principle is derived from the broader right of Native nations to govern their peoples, lands, and resources, and it aligns with international declarations such as the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) [11]. The practice of IDS, or Indigenous Data Governance (IDG), involves applying tribal cultures, values, and principles to manage their data ecosystems, giving them the power to decide how and when their data are gathered, analyzed, accessed, and used [10]. A key challenge in many Indigenous communities is the paradox of data abundance and scarcity, where vast amounts of data are collected *about* them by external entities, but rarely for their own purposes, leading to mistrust and a loss of control [10].

To operationalize IDS within the 'Viva-La: Evolution!' framework, several concrete steps are necessary. First, the framework must formally adopt internationally recognized guidelines like the C.A.R.E. Principles—Collective benefit, Authority to control, Responsibility, and Ethics—as a foundational standard for all collaborations [10]. This means acknowledging that tribal nations have the ultimate authority to decide the fate of their data. Second, formal partnership agreements must be developed for any joint projects. These agreements should stipulate that data generated during a pilot program remain the property of the tribal nation and cannot be used or released without prior review and approval by tribal leadership, similar to models adopted by the Swinomish Tribe [10]. Federal laws like the Native American Graves Protection and Repatriation Act

(NAGPRA) provide a precedent for returning control over sensitive materials to Indigenous communities, and a similar logic must apply to data [10].

Furthermore, the governance structures for any pilot program on or near tribal land must be co-designed with tribal governments. The Navajo Nation Human Research Review Board (NNHRRB) offers a powerful model, having regulated research on its territory since 1996 through a rigorous 12-step process that mandates extensive community engagement and requires that all research data be turned over to the Nation at the conclusion of a project [10]. This ensures that the tribe retains ownership and control over the very information that was collected. Non-tribal entities and researchers can support IDS by acknowledging it as a global objective, investing in Indigenous data infrastructure and capacity-building, and creating intertribal institutions to manage shared data needs [10]. The following table contrasts traditional research practices with an IDS-aligned approach.

Aspect	Traditional Research Approach	Indigenous Data Sovereignty (IDS)-Aligned Approach
Data Ownership	Data is owned by the researcher or institution collecting it.	Data is owned by the Indigenous community that generated it [10].
Consent Process	Often a one-time signature on a generic consent form.	Ongoing, dynamic consent process involving community leaders and elders; based on the C.A.R.E. Principles [10].
Governance Structure	Led by external researchers and university IRBs.	Co-governed by tribal authorities and community representatives (e.g., NNHRRB model) [10].
Data Application	Used for the researcher's publication and grant objectives.	Must serve collective tribal benefit and align with community values [10].
Data Return/ Access	Data may be stored indefinitely in institutional repositories.	All data and intellectual property must be returned to the tribe upon project completion [10].

Integrating IDS is not merely a procedural requirement but a fundamental ethical and political necessity. It transforms the relationship from one of extraction to one of partnership, ensuring that the promise of "cybernetics for a living earth" does not come at the expense of Indigenous self-determination. Without this commitment, the framework risks replicating colonial patterns of data dependency and control, poisoning the well for public adoption far beyond tribal communities [10]. The path to a fair cybernetic future, as envisioned by 'Viva-La: Evolution!', runs directly through the recognition of tribal sovereignty in the digital realm.

Synthesis: Operationalizing Justice, Consent, and Trust as the Primary Metrics

The 'Viva-La: Evolution!' framework presents a comprehensive, rights-first blueprint for navigating the profound societal shifts brought by cybernetic and neuromorphic technologies. Its analysis reveals that the framework's viability is not determined by the elegance of its underlying mathematics, such as ecological safety polytopes or Karma ledgers, but by its ability to operationalize three primary, interconnected metrics: justice, consent, and democratic trust. The user's directive to subordinate technical feasibility to these civic imperatives is the single most important finding, as it correctly identifies that public acceptance is the ultimate bottleneck for adoption [39] [63]. The framework's greatest strength lies in its strategic narrative, which translates complex technical and ethical concepts into a simple, compelling story: inner mental freedom is absolute, and outer power is earned through transparent ecological responsibility .

The path to realizing this vision requires a deliberate, phased, and community-centered strategy. The initial phase must focus on building a solid legal and regulatory foundation. This involves expanding state-level privacy laws to provide robust, dynamic protections for neural data, going beyond current models to mandate granular consent for each use case, and advocating for the eventual constitutionalization of neurorights to create durable, hard-edged protections for mental privacy and cognitive liberty [38] [88] [89]. Simultaneously, statutes must be developed to ground the concept of a "Karma ledger" in verifiable environmental accounting, tying access to high-impact infrastructure to demonstrable ecological performance and restorative outcomes [53] [55].

Following the establishment of this legal groundwork, the framework must be tested and refined through hyper-transparent, locally-controlled pilot programs. By starting in specific micro-neighborhoods, the framework can deliver tangible, visible benefits in public health and environmental quality, proving its value proposition before seeking wider adoption [3]. Crucially, these pilots must be co-designed with communities, incorporating formal veto powers and ensuring that participation is genuinely reversible [29] [88]. This process is not merely about testing technology; it is about building social license and demonstrating a commitment to participatory governance.

Throughout this process, the framework's internal coherence must be rigorously maintained. It must withstand stress-testing in high-stakes contexts like medicine and the workplace, where subtle forms of coercion threaten to undermine the principle of voluntariness. Safeguards must be put in place to ensure that refusing a therapeutic BCI or declining an incentive-laden workplace program never carries penalties for core civil

rights [81]. Likewise, the ecological scoring system must be designed with equity at its core to prevent it from becoming a tool that disproportionately burdens marginalized communities [52] [65].

Finally, the framework's success is inextricably linked to its ability to engage with Tribal Nations on the basis of sovereignty. Adhering to the principles of Indigenous Data Sovereignty (IDS) and the C.A.R.E. Principles is not an add-on but a foundational requirement for legitimacy [10]. Respecting tribal authority over data collection and application is essential for building trust and avoiding the replication of colonial-era patterns of exploitation.

In essence, 'Viva-La: Evolution!' is less a technical manual and more a political and ethical project. It offers a coherent, principled alternative to dystopian narratives of technological determinism and surveillance capitalism. By relentlessly focusing on justice, consent, and democratic trust, and by translating these principles into tangible policies, civic guarantees, and community-led initiatives, the framework provides a viable pathway toward a future where cybernetic evolution upgrades our rights and responsibilities before it upgrades our hardware .

Reference

1. [PDF] Climate Change from the Streets: A Community-based Framework ... https://escholarship.org/content/qt5gf6z6hs/qt5gf6z6hs_noSplash_2b43056da7afa8d7a35f4d4bb21af96a.pdf
2. Advancing Environmental Justice Technologies & Technospaces https://www.sciencedirect.com/science/article/pii/S2666558126000187
3. Rapid Adaptation to Prevent Drug Use (RAPD): protocol of a pilot ... https://pmc.ncbi.nlm.nih.gov/articles/PMC11748840/
4. How to design equitable digital health tools: A narrative review of ... https://www.researchgate.net/publication/383304223_How_to_design_equitable_digital_health_tools_A_narrative_review_of_design_tactics_case_studies_and_opportunities
5. Regulating neural data processing in the age of BCIs - PMC https://pmc.ncbi.nlm.nih.gov/articles/PMC11951885/

6. (PDF) Framework, Standards, Applications and Best practices of ... https://www.researchgate.net/publication/390990518_Framework_Standards_Applications_and_Best_practices_of_Responsible_AI_A_Comprehensive_Survey
7. A Survey on Security and Privacy Issues in Modern Healthcare ... https://www.researchgate.net/publication/353567164_A_Survey_on_Security_and_Privacy_Issues_in_Modern_Healthcare_Systems_Attacks_and_Defenses
8. Wayne Bibliography | PDF | Federal Emergency Management Agency https://www.scribd.com/document/154082116/Wayne-Bibliography
9. Protecting Brain Privacy in the Age of Neurotechnology https://www.researchgate.net/publication/384971350_Protecting_Brain_Privacy_in_the_Age_of_Neurotechnology_Policy_Responses_and_Remaining_Challenges
10. Indigenous Data Governance: Strategies from United States Native ... https://pmc.ncbi.nlm.nih.gov/articles/PMC8580324/
11. The 3rd UNESCO Global Forum on the Ethics of AI 2025, 24-27 ... https://unesdoc.unesco.org/ark:/48223/pf0000396997
12. The MIND Act: Balancing Innovation and Privacy in Neurotechnology https://www.cooley.com/news/insight/2025/2025-09-25-the-mind-act-balancing-innovation-and-privacy-in-neurotechnology
13. Neurorights, Mental Privacy, and Mind Reading | Neuroethics https://link.springer.com/article/10.1007/s12152-024-09568-z
14. (PDF) Neurorights, Mental Privacy, and Mind Reading - ResearchGate https://www.researchgate.net/publication/382079309_Neurorights_Mental_Privacy_and_Mind_Reading
15. The risks and challenges of neurotechnologies for human rights https://unesdoc.unesco.org/ark:/48223/pf0000384185
16. China Institute for Socio-Legal Studies, Shanghai Jiao Tong University http://www.socio-legal.sjtu.edu.cn/en/wxzy/info.aspx?itemid=4430
17. Neurorights and Mental Privacy Explained | PDF | Mind - Scribd https://www.scribd.com/document/854375536/s12152-024-09568-z
18. (PDF) Viva la Poster - Academia.edu https://www.academia.edu/113706311/Viva_la_Poster
19. Embodiment, Corporality, and the Reconstruction of the Italian Body ... https://escholarship.org/uc/item/492903f9
20. The Left and Digital Politics: Political Parties from Platform ... - jstor https://www.jstor.org/stable/pdf/10.16997/book75.pdf

21. Smart cities: shaping the society of 2030 - unesco https://unesdoc.unesco.org/ark:/48223/pf0000367762
22. [PDF] 2024 Brochure - Bridge https://bridge-smart-grid-storage-systems-digital-projects.ec.europa.eu/system/files/2024-08/05-07-2024_BRIDGE-brochure-final%20%281%29.pdf
23. [PDF] WSIS Stocktaking 2020 Global Report: ZERO DRAFT - ITU https://www.itu.int/net4/wsis/forum/2020/Files/outcomes/draft/GlobalWSISStocktakingReport2020_DRAFT.pdf
24. [PDF] national conference on engineering innovations in emerging ... - ijsrst https://ijsrst.com/paper/v12i15.pdf
25. [PDF] Practical Internet of Things Security - ResearchGate https://www.researchgate.net/profile/Ali_Al-Qurabat2/post/Can_any_one_share_me_a_Book_of_Practical_Internet_of_Things_Security/attachment/5a415ea84cde266d587da2a7/AS%3A575551220207619%401514233512763/download/Brian+Russell%2C+Drew+Van+Duren-Practical+Internet+of+Things+Security-Packt+Publishing+%282016%29.pdf
26. AWS Acronyms 2 | PDF | Amazon Web Services | Wiki - Scribd https://www.scribd.com/document/936181564/AWS-Acronyms-2
27. Brazil: readiness assessment report on artificial intelligence - unesco https://unesdoc.unesco.org/ark:/48223/pf0000393091
28. Neuroethics Questions to Guide Ethical Research in ... - ResearchGate https://www.researchgate.net/publication/328211617_Neuroethics_Questions_to_Guide_Ethical_Research_in_the_International_Brain_Initiatives
29. [PDF] 84286 v4 - World Bank Documents & Reports https://documents1.worldbank.org/curated/en/476701468155119757/pdf/842860v40WP0St00Box382152B00PUBLIC0.pdf
30. 978-1-349-21246-0.pdf https://link.springer.com/content/pdf/10.1007/978-1-349-21246-0.pdf
31. (PDF) THE COMMONS - Academia.edu https://www.academia.edu/44342885/THE_COMMONS
32. scrabble.txt - CMU School of Computer Science https://www.cs.cmu.edu/~wlovas/15122-r11/lectures/old/24-tries/scrabble.txt
33. a systematic analysis for the Global Burden of Disease Study 2023 https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(25)01637-X/fulltext
34. ISPN 2025: 51 st Annual Meeting of the International Society for ... https://link.springer.com/article/10.1007/s00381-025-06956-5

35. Mental privacy: navigating risks, rights and regulation - PMC - NIH https://pmc.ncbi.nlm.nih.gov/articles/PMC12287510/
36. Neurotechnology Governance in the United States: Gaps and ... https://onlinelibrary.wiley.com/doi/10.1111/bioe.70062?af=R
37. Beyond neural data: Cognitive biometrics and mental privacy https://www.sciencedirect.com/science/article/pii/S0896627324006524
38. Neurorights in the Constitution: from neurotechnology to ethics and ... https://pmc.ncbi.nlm.nih.gov/articles/PMC11491849/
39. Understanding local opposition to renewable energy projects in the ... https://www.sciencedirect.com/science/article/pii/S2214629625000763
40. 333333 23135851162 the 13151942776 of 12997637966 ftp://ftp.cs.princeton.edu/pub/cs226/autocomplete/words-333333.txt
41. [PDF] Public Engagement and Carbon Dioxide Removal - UC Davis https://escholarship.org/content/qt9fz1931x/qt9fz1931x.pdf
42. [PDF] The protection of mental privacy in the area of neuroscience https://www.europarl.europa.eu/RegData/etudes/STUD/2024/757807/EPRS_STU(2024)757807_EN.pdf
43. The neurotechnology patent landscape in a time of neuroethics https://www.nature.com/articles/s41599-025-04757-4
44. [PDF] A/HRC/57/61 - General Assembly - the United Nations https://docs.un.org/en/A/HRC/57/61
45. Outcome document of the first meeting of the AHEG: first draft of a ... https://unesdoc.unesco.org/ark:/48223/pf0000389768
46. What Is Life? Revisited - Cambridge University Press & Assessment https://www.cambridge.org/core/elements/what-is-life-revisited/E6B3EA136720CF50C9480ADB8F41A6F4
47. Augmented intelligence with voice assistance and automated ... - PMC https://pmc.ncbi.nlm.nih.gov/articles/PMC11913813/
48. [PDF] DISTRIBUTOR SETTLEMENT AGREEMENT https://attorneygenerallynnfitch.com/wp-content/uploads/2021/11/Final-Distributor-Settlement-Agreement-Distributors-8.13-Exhibit-Updates.pdf
49. [PDF] 2025 Global Guide to Autonomous Vehicles - Driverless Commute https://www.thedriverlesscommute.com/wp-content/uploads/2025/10/Dentons-Global-Guide-to-Autonomous-Vehicles-2025.pdf
50. Viva la evolution: Using dual-strategies theory to explain leadership ... https://awspntest.apa.org/doi/10.1016/j.leaqua.2019.101315

51. Behavioral Economics in People Management: A Critical and ... - PMC https://pmc.ncbi.nlm.nih.gov/articles/PMC12837508/
52. Approach to People-Centric Energy Transition: An Empirical Study ... https://www.researchgate.net/publication/391646738_Approach_to_People-Centric_Energy_Transition_An_Empirical_Study_from_Rajahara_Coalfield_Jharkhand
53. Global Social Policy Digest 23.2: Holding the line to prevent (further ... https://journals.sagepub.com/doi/10.1177/14680181231170673
54. From HCI to HAC (Human-AI Co-becoming) - ResearchGate https://www.researchgate.net/publication/391240289_L_Interaction_Paradigms_and_Design_Philosophy_for_Symbiotic_Intelligence_From_HCI_to_HAC_Human-AI_Co-becoming
55. 41666 PDFs | Review articles in DEDUCTION - ResearchGate https://www.researchgate.net/topic/Deduction/publications/24
56. Hw3-stats-google-1gram - CMU School of Computer Science https://www.cs.cmu.edu/~roni/11761/2017_fall_assignments/hw3_stats_google_1gram.txt
57. Neurotechnologies and human rights: restating and reaffirming the ... https://www.tandfonline.com/doi/full/10.1080/13642987.2024.2310830
58. [PDF] Standard ExxonMobil Acronym Definitions - pdfcoffee.com https://pdfcoffee.com/download/acronyms-3-pdf-free.html
59. 1 aa 2 aaa 3 aaaah 4 aaaargh 5 aaah 6 aaargh 7 https://www.cs.cmu.edu/~ark/blog-data/data/blog_data_v1_0/dk/hbc_data/data/cmnt_vocab.txt
60. It's (Not) Just Semantics: “Neurotechnology” as a Novel Space of ... https://www.cambridge.org/core/product/F32A1815FE6160C9002840675FFD638C/core-reader
61. Regulating neural data processing in the age of BCIs - Sage Journals https://journals.sagepub.com/doi/10.1177/20552076251326123
62. Integrated Quantum-Transportation-Consciousness Network: A ... https://www.researchgate.net/publication/396515292_Integrated_Quantum-Transportation-Consciousness_Network_A_Scientific_Book_Proposal_Consciousness-Guided_Quantum_Transportation_Integrating_Nonlocal_Neural_Networks_with_Plasma-Electric_Propulsion_Syst
63. Learning From Europe's Mediation Paradox: Why U.S. Mandates ... https://mediate.com/news/learning-from-europes-mediation-paradox-why-u-s-mandates-are-leading-where-the-eu-stumbled-2/
64. Digital Health Policy: FDA Relaxes Restrictions Over Wearables And ... https://www.mondaq.com/unitedstates/healthcare/1737984/digital-health-policy-fda-relaxes-restrictions-over-wearables-and-ai-decision-making-tools-in-two-new-2026-guidances

65. [PDF] LEGAL FOUNDATIONS FOR JUST TRANSITIONS: https://www.undp.org/sites/g/files/zskgke326/files/2025-11/undp-wb-legal-foundations-for-just-transitions-strengthening-national-frameworks-for-development.pdf
66. Climate policy conflict in the U.S. states: a critical review and way ... https://pmc.ncbi.nlm.nih.gov/articles/PMC8853238/
67. [PDF] International Human Rights Protection Gaps in the Age of ... https://ntc.columbia.edu/wp-content/uploads/2022/05/NeurorightsFoundationPUBLICAnalysis5.6.22.pdf
68. Beyond neural data: Cognitive biometrics and mental privacy https://www.cell.com/cms/10.1016/j.neuron.2024.09.004/attachment/8def5fc2-7d76-4c83-b118-053ee5e43668/mmc2.pdf
69. [PDF] To the Honorable Secretariat - OHCHR.org https://www.ohchr.org/sites/default/files/documents/hrbodies/hrcouncil/advisorycommittee/neurotechnology/03-ngos/ac-submission-cso-neurorightsfoundation.pdf
70. Acronyms Excel Xerox | PDF | Computing - Scribd https://www.scribd.com/document/656142986/Acronyms-Excel-Xerox
71. Preferred Reporting Items for Systematic Reviews and Meta-Analyses https://ideas.repec.org/r/plo/pmed00/1000097.html
72. Hw3 Stats Google 1gram | PDF | Internet Forum | Software - Scribd https://www.scribd.com/document/917428277/Hw3-Stats-Google-1gram
73. (PDF) The Face of Autism in Israel - ResearchGate https://www.researchgate.net/publication/383826829_The_Face_of_Autism_in_Israel
74. Cognitive sovereignty and neurocomputational harm in predictive ... https://link.springer.com/article/10.1007/s10676-025-09873-y
75. Cognitive sovereignty and neurocomputational harm in predictive ... https://www.researchgate.net/publication/397645323_Cognitive_sovereignty_and_neurocomputational_harm_in_predictive_digital_platforms
76. [PDF] Nº. 54 - United Nations Development Programme https://www.undp.org/sites/g/files/zskgke326/files/2024-11/pds-number54_use_of_futures_in_parliaments.pdf
77. Global human rights governance and orchestration - Sage Journals https://journals.sagepub.com/doi/abs/10.1177/1354066114548079
78. Improving brain computer interface research through user involvement https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0171818
79. BALANCING SOFT AND HARD LAW FOR BUSINESS AND HUMAN ... https://www.cambridge.org/core/journals/international-and-comparative-law-quarterly/article/balancing-soft-and-hard-law-for-business-and-human-rights/4C1AAC694C25E1C8F192BBD63036F38C

80. Silencing Science Tracker | Sabin Center for Climate Change Law https://climate.law.columbia.edu/content/silencing-science-tracker
81. (PDF) Need for greater post-trial support for clinical trial participants ... https://www.researchgate.net/publication/381160133_Need_for_greater_post-trial_support_for_clinical_trial_participants_assessing_high-risk_irreversible_treatments
82. Principles of Registry Ethics, Data Ownership, and Privacy - NCBI https://www.ncbi.nlm.nih.gov/books/NBK562583/
83. Standards Roadmap: Neurotechnologies for Brain-Machine Interfacing https://standards.ieee.org/wp-content/uploads/import/documents/presentations/ieee-neurotech-for-bmi-standards-roadmap.pdf
84. [PDF] shaping a rights ‐ oriented digital transformation | oecd https://www.oecd.org/content/dam/oecd/en/publications/reports/2024/06/shaping-a-rights-oriented-digital-transformation_30378a18/86ee84e2-en.pdf
85. [PDF] Biometric Recognition and Behavioural Detection https://www.europarl.europa.eu/RegData/etudes/STUD/2021/696968/IPOL_STU(2021)696968_EN.pdf
86. Construction and Optimization Strategy of an Ecological Network in ... https://pmc.ncbi.nlm.nih.gov/articles/PMC9368242/
87. HIPAA Enforcement: A Look Ahead At 2026 Informed By 2025's ... https://www.mondaq.com/unitedstates/healthcare/1744848/hipaa-enforcement-a-look-ahead-at-2026-informed-by-2025s-inflection-points
88. Calif. Bill Would Regulate Brain-Computer Interface Data - GovTech https://www.govtech.com/policy/calif-bill-would-regulate-brain-computer-interface-data
89. Regulating neural data processing in the age of BCIs: Ethical ... https://journals.sagepub.com/doi/abs/10.1177/20552076251326123
90. Empowering Government Efficiency Through Civic Intelligence - MDPI https://www.mdpi.com/2227-7080/12/12/271
91. What counts as care? Structural critique of digital health models - PMC https://pmc.ncbi.nlm.nih.gov/articles/PMC12816506/