

Legal Tech and the Promise of Enhanced Access to Justice

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Image credit: Gluckstein Lawyers, *"Technology Has the Power to Improve the Legal Profession"*

27 JUNE 2025 | COLOGNE
CONFERENCE



Image credit: Getty Images

Introduction

- Legal tech is often promoted as a solution for expanding access to justice.
- It promises efficiency, automation, and streamlined services that reduce administrative burdens, freeing time for high-quality legal work.
- What mechanisms do we have in place to evaluate, and ensure safety, human rights compliance, etc?



Legal Tech Examples

Legal tech tools can support:

- Automatic case summaries
- Evidence analysis and eDiscovery
- Digital case repositories
- E-filing systems
- Translation and remote interpretation
- Virtual legal aid and mobile access



Image credit: AP Photo / Shutterstock





Remote Legal Aid and Access Services

- Hope Behind Bars Africa enables prisoners to access case information via mobile phones.
- Virtual clinics and online triage systems can expand reach in underserved communities.

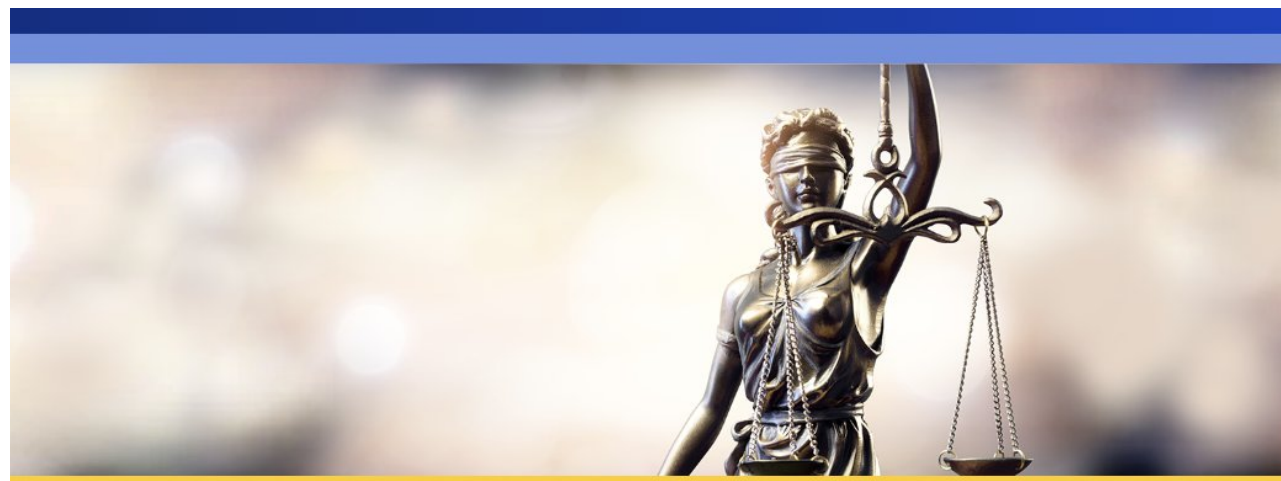
Image credit: Ilya Ginzburg / Dreamstime



E-Services

Examples:

- European e-Justice Portal
- Kenya's judiciary uses e-filing and digital repositories to reduce delays and improve access
- Online dispute resolution mechanisms
- These tools promise lower costs, transparency, and improved access in remote or under-resourced areas
- Online (multi-lingual and accessible) directories for justice and victim support services - searchable by postcode, keyword, etc.



Welcome to the European e-Justice Portal!

Image credit: e-justice.europa.eu

Inclusive approaches require the provision of in-person and paper-based options.

Digital Repositories

Tech tools for Open Justice

SHERLOC SHARING ELECTRONIC RESOURCES
AND LAWS ON CRIME



United Nations
Office on Drugs and Crime

A screenshot of the SHERLOC website homepage. The top navigation bar includes links for 'About us', 'Databases', 'Tools & Resources', 'Contribute', and 'Contact us'. The main content area features a grid of various publications with titles in Spanish and English, such as 'LOS DELITOS EN EL SECTOR PESQUERO', 'TRAFFICKING TE AMBEJEVE', 'COMBATIR LA CONTAMINACION POR POLUCION CRIME', 'ORGANIZED FRAUD', 'COMBATIR EL CRIME MEDICO', and 'ONLINE INTERMEDIARIES'. A blue 'DOWNLOAD' button is visible in the bottom right corner of the grid. Below the grid, the text 'Tools and Publications' is displayed in large white font.

- The Caselaw Access Project (Harvard University)
- World Legal Information Institute (worldlii.org)
- UNODC Sherloc

Case Summaries: Making Law Accessible

- AI tools can simplify complex legal decisions for wider audiences.
- Example: Caselaw Access Project uses NLP to summarize judicial rulings and make them publicly accessible.

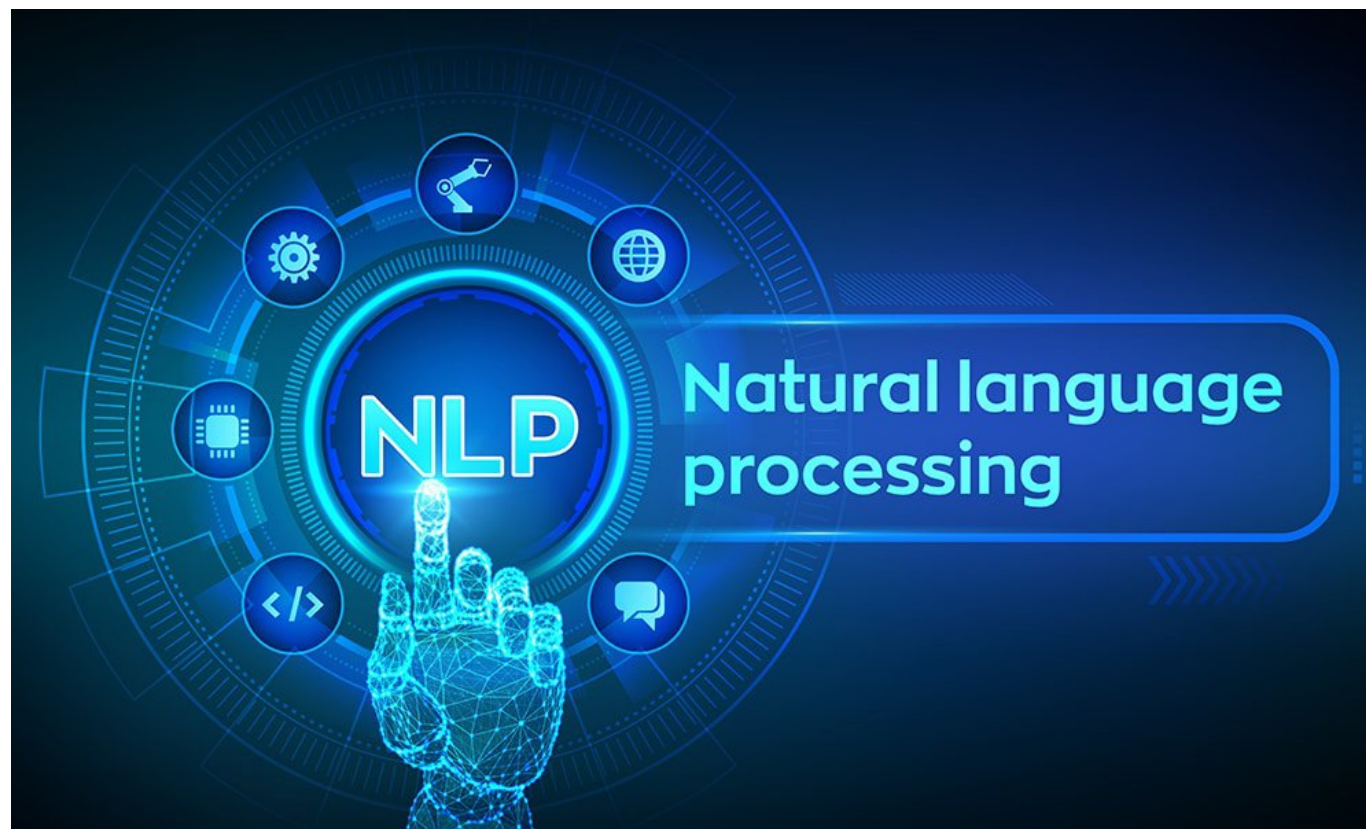


Image credit: Botpress

Evidence Analysis: Enhancing Legal Workflows

- AI-supported analysis helps lawyers process large datasets, uncover patterns, and organize evidence.
- However, risks include over-reliance and biased algorithms in criminal or civil litigation.



Image credit: © LegalProd / legalprod.com

Translation & Interpretation Support

- AI-based translation tools and virtual interpreters can bridge linguistic divides and assist in transcending barriers to access for persons with disabilities.
- Pilot projects and ad hoc use in various countries.



Generative AI in Court

Multiple instances of hallucination of cases, citations, and statute in:

- Legal briefs, arguments, and judgements
- Expert testimony
- Prosecution petition for seizure of evidence

Raises questions regarding:

- *Equality of Arms*
- *Accuracy, accountability & Right of Appeal*
- *Judicial/legal competence*



Chatbots for children?

- Chatbot for providing child-friendly information about children's rights
- Does **not** offer tailored legal advice
- Clearly introduced as a bot, not a friend
- Accessible only via professional referral

i-Access My Rights: 'Smart' justice for children, with the aid of artificial intelligence



i-ACCESS



Terre des hommes

Helping children worldwide. tdh.ch

Virtual Reality in Court

- VR crime scene simulation
- USA March 2025 (Meta Quest 2 headset)
- Developed by the expert witness for the defence)



Raises questions regarding:

- *Equality of Arms*
- *Accuracy*
- *Accountability*
- *Right of Appeal*
- *Judicial/legal competence*
- *Addressing the justice gap?*

Colombian Court



2023
The first to use the metaverse for court proceedings.

Image credit: New York Post



Image credit:
University of Ottawa



Deepfake Victim Statements



- South Korea & USA - deepfake videos of deceased victims' impact statements.
- Raises ethical debates around authenticity, consent, and emotional manipulation, and equality of arms in trials.

Bar Associations' Perspectives



Image credit: European Criminal Bar Association (ECBA)



Image credit: CPD Standards Office / The Law Society



Image credit: European Criminal Bar Association (ECBA)



Risks & Limitations of Legal Tech

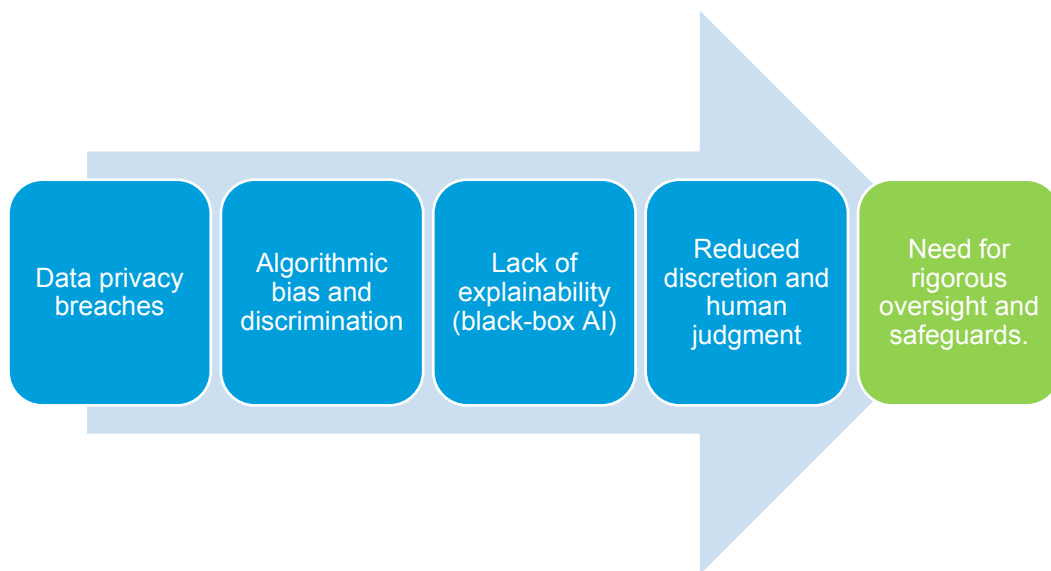


Image credit: CyberDB (<https://www.cyberdb.co>)

“Licensed” AI Therapy Bots



ARTIFICIAL INTELLIGENCE

When AIs bargain, a less advanced agent could cost you

New research shows that in AI-to-AI price negotiations, weaker models often lose out—costing users real money and raising concerns about growing digital inequality.

By Caiwei Chen

June 17, 2025



Image credit: MIT Technology Review

UK POST OFFICE SCANDAL



Image credit: youtube.com



Royal Commission into the Robodebt Scheme

How a Discriminatory Algorithm Wrongly Accused Thousands of Families of Fraud

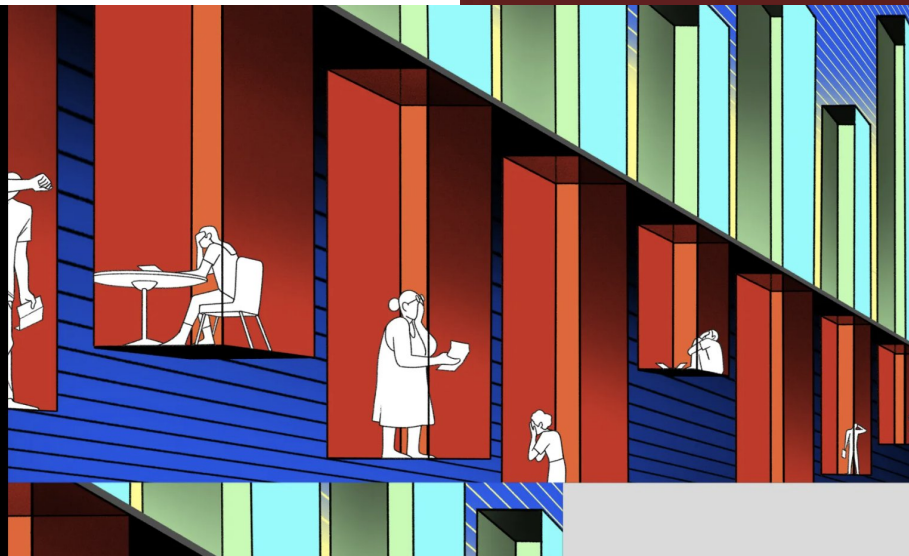
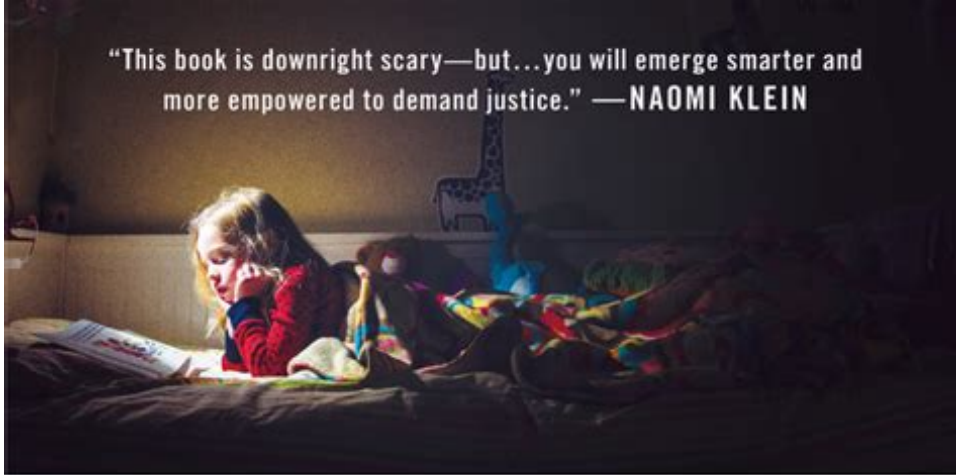


Image credit: vice.com

Image credit: theconversation.com

"This book is downright scary—but...you will emerge smarter and more empowered to demand justice." —NAOMI KLEIN



AUTOMATING INEQUALITY

HOW HIGH-TECH TOOLS PROFILE,
POLICE, AND PUNISH THE POOR



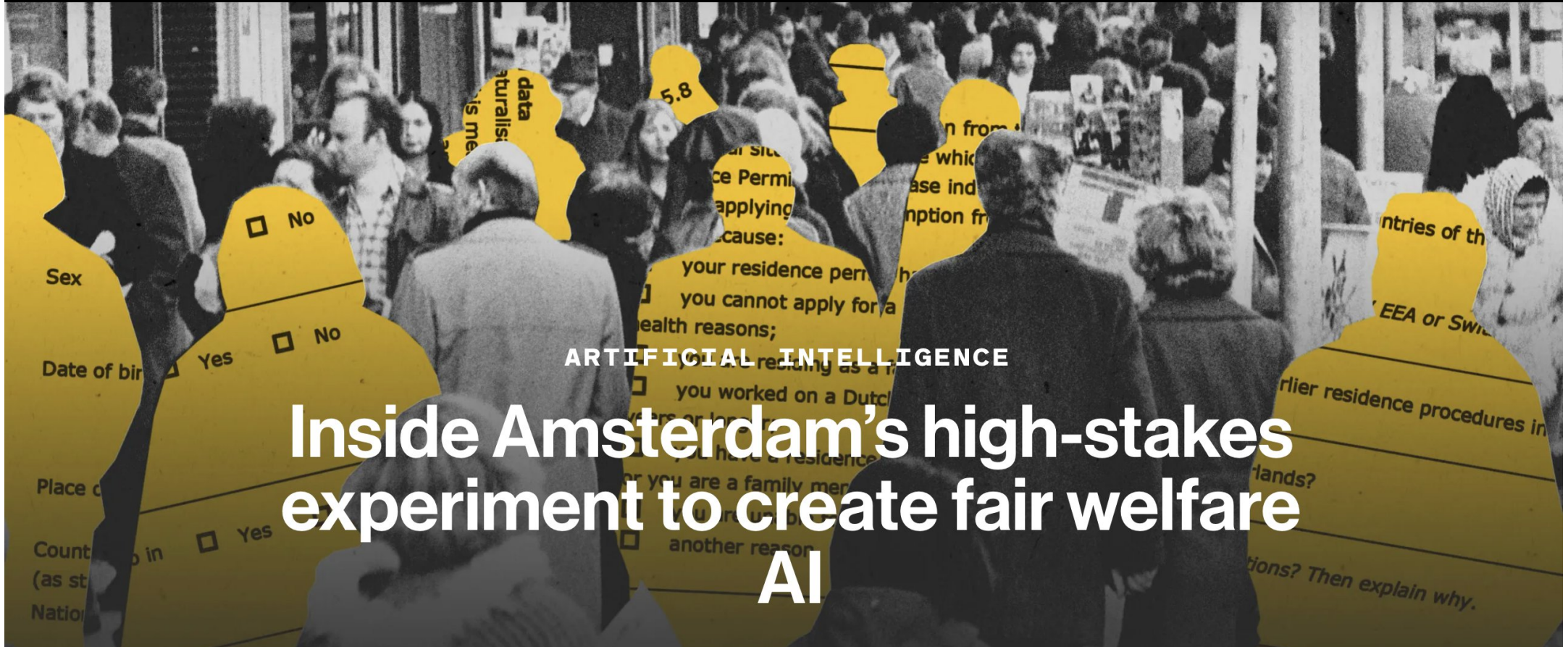
VIRGINIA EUBANKS

WEAPONS OF MATH DESTRUCTION



HOW BIG DATA INCREASES INEQUALITY
AND THREATENS DEMOCRACY

CATHY O'NEIL



ARTIFICIAL INTELLIGENCE

Inside Amsterdam's high-stakes experiment to create fair welfare AI



Image credit: tecnalía.com

Defining Neurotechnology

A field of science and biomedical engineering encompassing various electronic technologies and procedures designed to interact with, monitor, and/or modulate the central and peripheral human nervous system.



Use Cases – Clinical (diagnostic & therapeutic)

Brain imaging:

- Structural (e.g. CAT, MRI)
- Functional (e.g. PET, fMRI) For diagnostic purposes.

Deep Brain Stimulation: Surgical implant of a neurostimulator (with a connected battery) to alleviate symptoms of various motor control disorders, including Parkinson's disease, or for epilepsy, or pain management, etc.



Image Credit: Photo courtesy of David McMillan Magazine.miami.edu



Use Cases – Assistive Technologies

Brain implants: Invasive brain computer interfaces (BCIs), and/or spinal cord implants allow individuals with spinal cord injury, or other conditions of paralysis, to communicate, to control limbs and/or prosthetics or robotic limbs, or to drive a specially modified vehicle.

Neural prostheses: i.e. cochlear implants to restore/create sound perception in patients with sensorineural hearing loss.



Image Credit: Photo courtesy of David McMillan Magazine.miami.edu



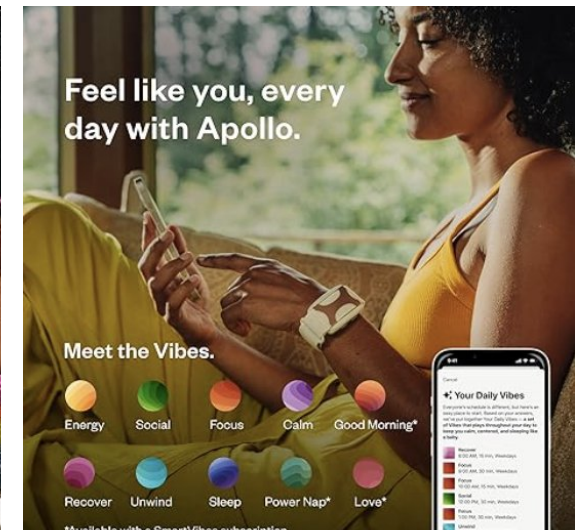
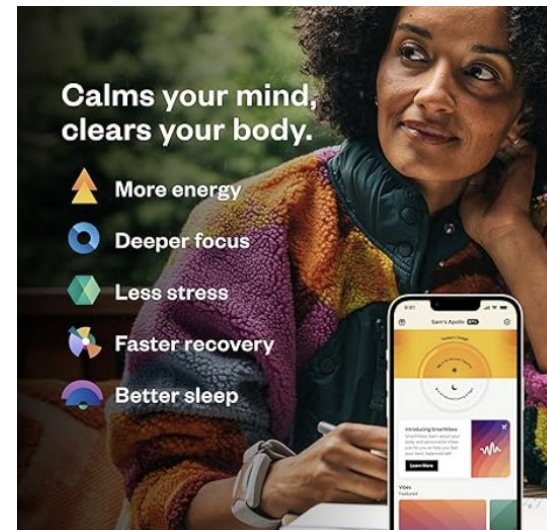
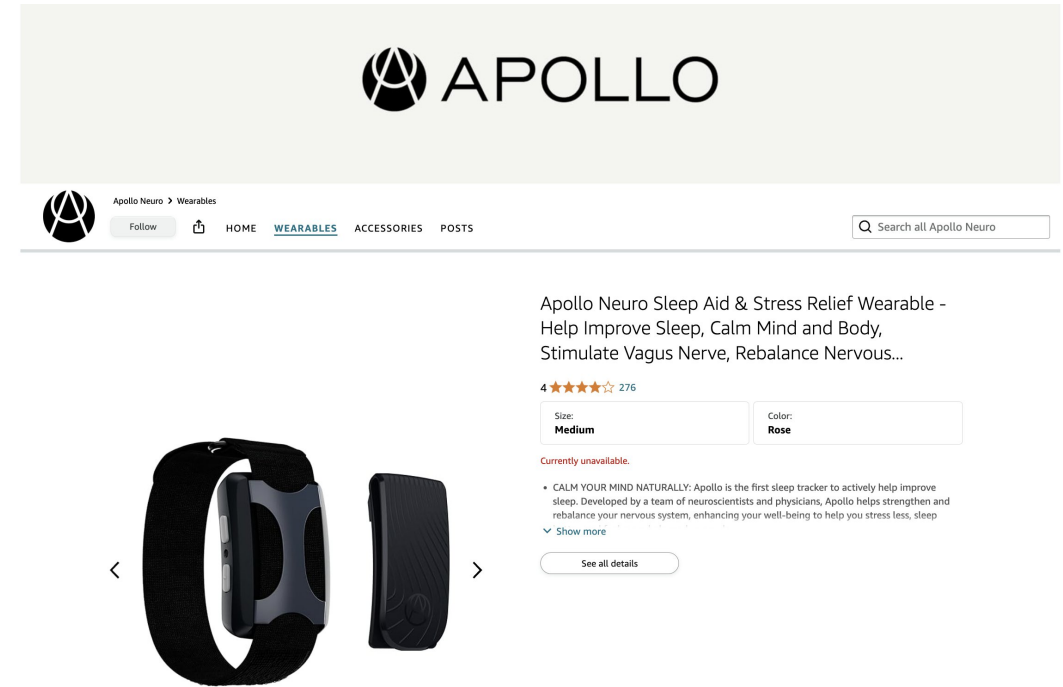
Use Cases – Consumer Neurotechnologies

The technologies:

Non-invasive brain computer interfaces (BCIs). EEG (electroencephelagram) wearables such as headbands, wristbands, anklets, clips, or earbuds.

Ostensible benefits:

- Increased focus, improved cognition, migraine relief, improved relaxation, meditation, sleep, or sporting performance.

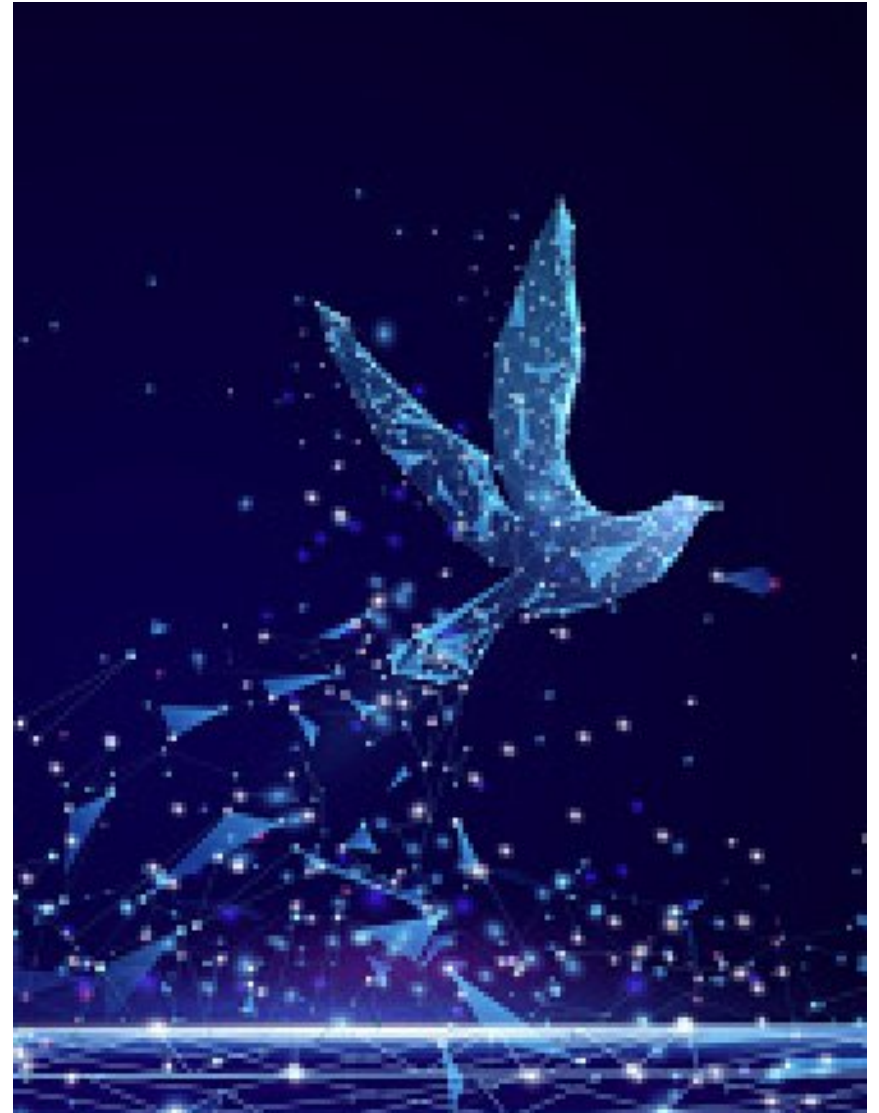


Legal, Ethical, and Logistical Considerations for Justice

All human rights, data protection, explainability, and consent considerations, etc. as well as....

- Reliability – Accuracy – General applicability
- Neurodiversity & Algorithmic Standards
- Constitutional protections
- Legal standards for admissibility
- Novel neurotech-facilitated crimes?
- Novel defence strategies?
- Novel sanctions?
- Capacity of CJS actors to understand & correctly handle specialized (neuro data) evidence

 Resisting the scientific “hype”.



Contentious (prospective) applications of neurotech in forensic settings

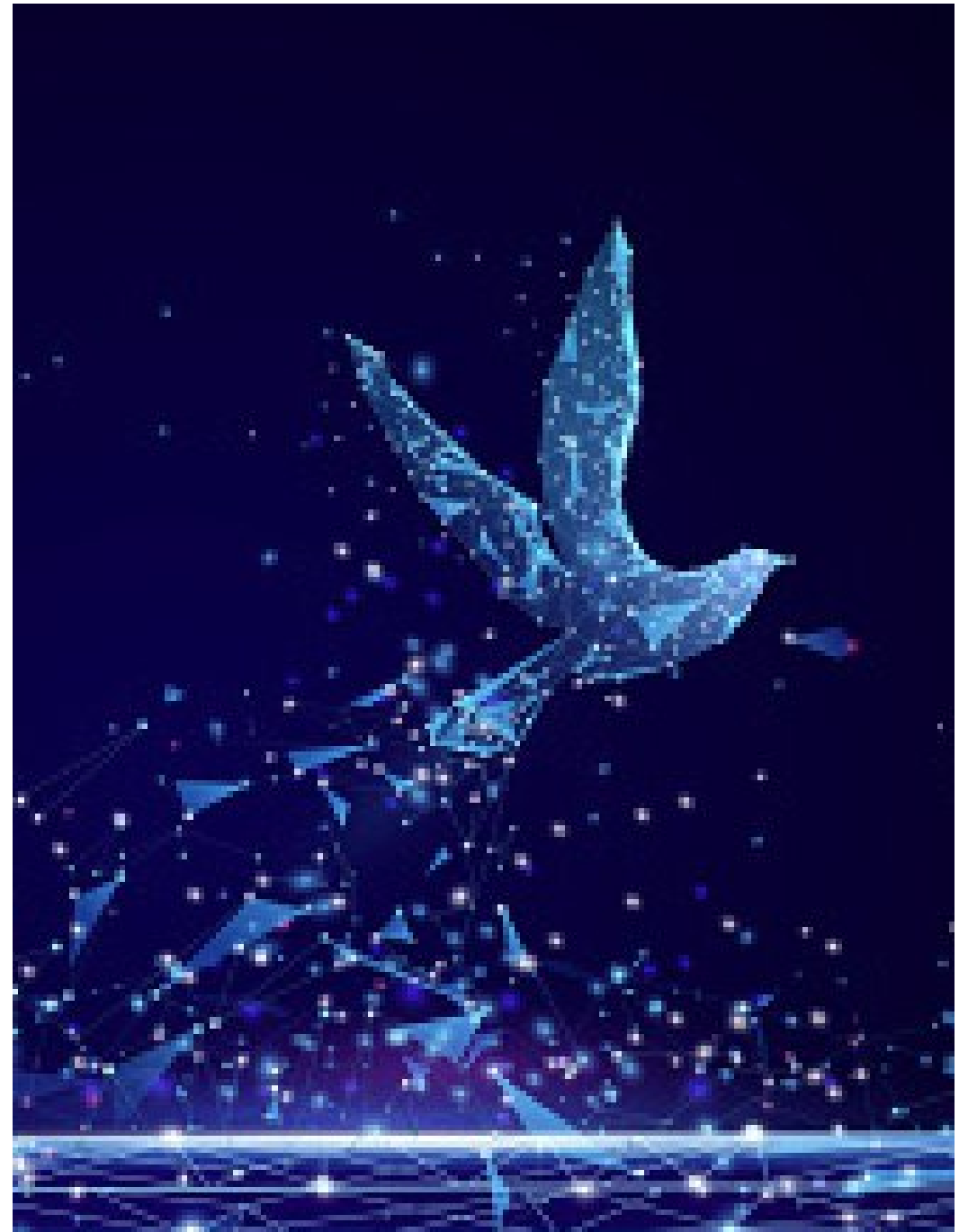


Image Credit: govtech.com

- Lie Detection - neuroimaging (fMRI) vs polygraph
- Memory Detection (guilty knowledge tests)
 - e.g. “Brain fingerprinting”, P3000
- Assessment of behavioural disposition (such as pedophilia) by assessing neural activity in response to visual erotic stimulation. (fMRI (Functional Magnetic Resonance Imaging)).
- “Neuroprediction” of future conduct/risk
- Exposure to subliminal stimuli
- Inferences from microfacial reflexes
- Biometric identification



Affording Legal Aid



Conclusion and Next Steps

Precision and detailed tech literacy is vital for moving beyond a binary of techno-utopianism/doomerism

Foresight is required, to anticipate and plan for new/evolving modalities for the weaponisation of tech by malicious actors

Criminal justice systems are broken – we need to resist simplistic “silver bullet” narratives promising tech solutions

It is important that we reclaim the full meaning of the term “innovation” – to avoid the tech/innovation conflation.

Meaningful strengthening of justice systems requires policy innovation (legislative reform, organizational reform).

Only when systems are working well, could we consider tech interventions that would accelerate, automate.





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Image credit: Applied Artificial Intelligence Lab, University of Lausanne
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