

AI, Law and Governance

Lecture 4

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MORE
THAN JUST A
GAME



Generative AI – Facts and figures

- **100 million** people use ChatGPT on a weekly basis, says OpenAI CEO Sam Altman
- **89.2%** of artists believe that current copyright laws are inadequate in the age of generative AI
- **80%** of women are employed in fields vulnerable to automation by generative AI
- **Two million** developers are working on apps built on OpenAI's platform
- **90%** of online content could be generated by AI by the end of 2025
- The value of the generative AI market will increase by **\$180 billion** in the next eight years

Generative AI

- Generative AI tools can create new content, such as text, computer code, images, audio, sound, and video, in response to a user's prompt
- ChatGPT, Midjourney, Copilot, Firefly, and more
- It is based on machine learning and trains on vast amounts of data, in public domain or proprietary, or both

Generative AI and legal implications

- Personal data and confidentiality
- Data protection principles
- Output issues
- Contractual terms
- Intellectual property

Generative AI and IP

- IPRs are the bloodline of the industry, facilitating the investment into and development of the infrastructure, the inputs and outputs

- Consideration include protection of the:

- Algorithms as such
- Software
- Hardware
- AI inputs (data)
- AI outputs (data and content)

IPRs

- Copyright
- Database right
- Patent
- Trade mark
- Design

- Trade secrets / confidentiality
- Licenses / contracts

AI Inputs and IP

- Text and data mining, scraping
- Refers to computer-based analysis of large bodies data (structured) and text (unstructured) in order to derive correlations, patterns and relationships
- Advances in AI, coupled with the availability of data and increasing computational powers, TDM has become a hugely important research tool for scientific and commercial purposes
- Potential conflict with copyright, database right and contracts
- Available exceptions?

Generative AI and lawsuits I

- DABUS (the Artificial Inventor) has been testing the boundaries of copyright since 2018
- Attempts to register an image *A Recent Entrance to Paradise* with the US Copyright Office (USCO)
 - Registration refused in line with previous US case law and guidance, which requires the author to be human
- *Zarya of the Dawn*, a graphic novel generated using MidJourney registered and subsequently cancelled
- The Canadian Copyright Register has included since 2021 a registration naming an AI, RAGHAV, as a joint author with a human

Generative AI and lawsuits II

- January 2023: A group of visual artists has sued AI companies such as Stability AI, Midjourney and DeviantArt for copyright infringement
- February 2023: Stock photo provider Getty Images sued Stability AI in the United States, alleging that it had infringed on Getty's copyrights
- March 2024: *New York Times vs. OpenAI* Lawsuit: The New York Times denied an OpenAI claim that the newspaper improperly used OpenAI products to create "highly anomalous results" as part of its lawsuit against the AI startup, SeekingAlpha reported.
- March 2024 - *Lawsuit vs. Nvidia*: Three authors -- Brian Keene, Abdi Nazemian and Stewart O'Nan -- have sued Nvidia because the chip giant alleged used their copyrighted books without permission to train its NeMo AI platform

Generative AI and backlash

- Stock image libraries started to introduce a ban for generative AI tools (e.g. Getty Images, Newgrounds, and PurplePort)
- An AI rapper, FN Meka, with over 10 million followers on TikTok was signed by Capital Music Group and almost immediately dropped following complaints of cultural insensitivity
- A journalist used Midjourney to illustrate an article in The Atlantic and was attacked on social media for not hiring an illustrator
- TV and film writers represented by Writers Guild of America (WGA) were on strike, including for concerns about the use of generative AI to produce scripts

Questions

Do you think it is possible to for machines to be creative? Should the law protect and rewards non-human creativity?

Go to www.menti.com and use the code **4428 7004**

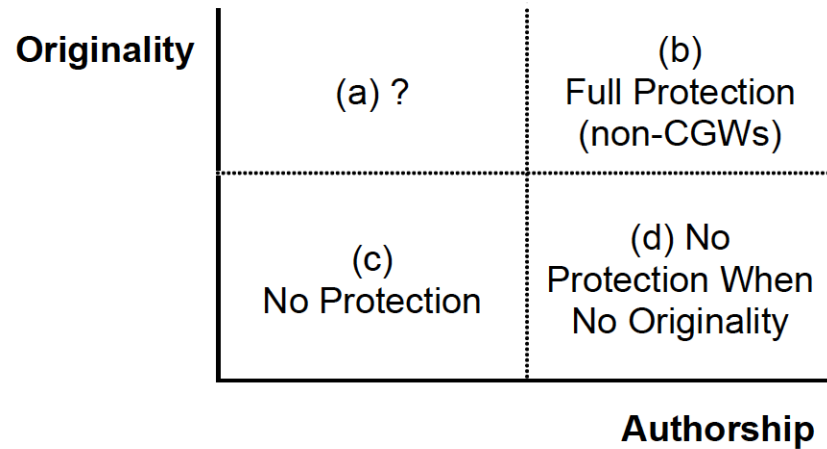
AI Outputs and IP

- Copyright law is designed to encourage the production of new works by allowing their creators to profit exclusively from them and recoup their costs
- On the EU level, intellectual products must have:
 - An objectively discernible form (expression, description or visual representation)
 - Expressive or informational properties
 - Identifiable human creator(s)

Copyright protection of computer-generated works

- UK – CDPA section 9, allocates copyright protection for such works to the person who made the arrangements necessary for the work to be created
- Section 178 as works “generated by computer in circumstances such that there is no human author of the work”
- Originality and subject matter requirements (*Nova Productions v Mazooma Games Ltd & Ors*)
- EU – originality requirement, no need for categorisation – focus on the author as the source of creativity and expression of creative choice (*Infopaq, BSA, Painer*)
- US – minimum degree of creativity, author has to be a human being (*Naruto v. Slater*)

Copyrightability of AI outputs



- Authorial works = original works = works that express author's own intellectual creation
- The work must result from an author's free and creative choices and to bear their personal mark

The Bruce Willis Deepfake Is Everyone's Problem

There's a fight brewing over how Hollywood stars can protect their identities. But it's not just actors who should be paying attention.



- VALL-E, a speech synthesiser, aims to to synthesize high-quality personalized speech with only a 3-second enrolled recording of an unseen speaker as an acoustic prompt
- Legal concerns include:
 - Copyright
 - Passing off / right of publicity / personality rights
 - Unfair competition
 - Human rights

Deepfakes: Rights in likeness and voice

- Likeness and voice are protected in many countries, though such
- protection is not harmonized
- Forms of protection include some IP rights (such as passing off in common law countries), unfair competition laws, human rights, constitutional rights, and publicity rights.

Can AI be inventive?

- Human inventors using AI tools or computers inventing autonomously without human intervention
- AlphaGo is a machine learning algorithm devised by DeepMind to assist in playing the Chinese game of Go
- Google DeepMind Challenge Match, a five-game match between 18-time world champion Lee Sedol and AlphaGo in March 2016
- AlphaGo won



AlphaGo – invention or trial and error?

- AlphaGo was capable of reading and understanding the prior art of the game Go
- AlphaGo is only capable of reading out single possible moves in a game of Go
- It does not devise Go strategies underlain by a unified inventive concept for winning Go

AI as an inventor

- A recent legal study established that none of the examined jurisdictions (the US, China, Japan, Republic of Korea, United Kingdom, Germany, France and Switzerland) allows for AI systems to be considered as an inventor under their patent law regimes

Protecting elements of AI

- Data
- Software
 - Code and architecture protectable by copyright and trade secrets
 - GUI potentially protectable by copyright, design rights, trade marks, unfair competition
 - Software-implemented inventions may be protected by patents
- Algorithms
 - As a set of instructions protectable by trade secrets, contracts (part of patentable subject-matter)
 - AI-generated creations and inventions currently not protectable by copyright or patents (AI as a creator / inventor) (UK computer-generated works)

Discussion

The fair use doctrine says that brief excerpts of copyright material may, under certain circumstances, be quoted for purposes such as criticism, news reporting, teaching, and research, without the need for permission from or payment to the copyright holder.

Should AI companies be allowed to use works under copyright protection without consent?

Go to www.menti.com and use the code **4428 7004**

Discussion

- What would be the justification to introduce protection for AI / computer-generated works and inventions?
- Who would benefit?
- What would be the impact on human creativity and innovation?

Thank you!