



KEY TAKEAWAYS

Demystifying AI

Presented by Rishal Hurbans



create it. own it.

spoor • fisher

patents • trade marks • copyright

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Introduction: The Blue Nodes, the Border Collie and the Shepherds

The Meeting

In our rapidly transforming world, where technological marvels redefine the conceivable, there's a fascinating intersection: the law and artificial intelligence (AI). What we are seeing is a border collie trying to herd something very different to sheep.

Together with our colleagues and clients from diverse fields, our seminar "Where Law Meets Machine Intelligence," held on 15 March 2024, explored this twenty first century shepherding of complex not-sheep, in all their magnificent blue node-ness splendour and their awesome applications in business, to their wicked acts of copyright heists and personality violations and their questionable ethical leanings.

Our plan

In our journey with the flock of blue nodes and the border collie we set out to:

1. **demystify the flock:** by providing a foundational understanding of AI systems and their transformative impact on commerce and society;
2. **understand how the border collie herds and how it's been "super trained" by the front runner shepherds:** by having a look at the current and emerging legal challenges posed by AI, particularly in relation to intellectual property (IP), data and privacy; understanding how these challenges are addressed in our current law and in the laws of the front runners of AI legislation – the front runner shepherds, bearing their "AI system risk classification" staves; and offering our own insights.
3. **foster ethical integration:** by highlighting the legal risks and ethical considerations inherent in deploying AI systems with a focus on developing strategies that promote the responsible use of AI in a way that supports organisational/ leadership ethics, responsible corporate citizenship and effective risk governance and management that is aligned with strategy; and
4. **encourage proactive adaptation:** by encouraging participants to anticipate future trends and prepare for the legal, ethical, and business implications of AI advancements.

With this retrospective we hope to inspire continued exploration and dialogue among those of us who journey with the flock of blue nodes, the border collie and the shepherds We invite you walk with us.

Demystifying AI - Rishal Hurbans

Demystifying AI: Unveiling the Future of Business and Law

In an era where artificial intelligence (AI) has transcended the bounds of science fiction to become a cornerstone of modern business and (some) legal practice, understanding its fundamentals and implications is imperative. Rishal Hurbans' session provided a compelling narrative into the essence of AI, its applications, and the concerns it raises in the business world. Hurbans' session not only illuminated the foundational aspects of AI but also provided a roadmap for its effective integration into business practices. By demystifying AI, he offered a lens through which we can better understand its potential, challenges, and laying the foundation for taking into account the critical importance of navigating its legal implications thoughtfully.

Basics of AI: A Foundation for Understanding

Hurbans began with a fundamental question: How does AI predict text, images, music, and more? AI, at its essence, operates on the principle of prediction. Through vivid examples, Hurbans demonstrated how AI systems predict text completion, the next pixel in an image, or the subsequent note in a musical sequence. These capabilities are not merely technical feats but the building blocks of AI's transformative power across sectors.

Key Insights: The Engines of AI's Capabilities

- **Large Language Models and Reinforcement Learning:** At the heart of AI's ability to understand and generate human-like text lies the power of large language models. These models, trained on vast swaths of internet text, learn patterns, nuances, and the structure of language itself. Reinforcement learning, meanwhile, refines these capabilities, enabling models to improve through feedback, much like humans learn from experience.
- **Datasets:** The fuel for these models comes from diverse and extensive datasets. Hurbans highlighted datasets such as Common Crawl and Wikipedia, underscoring the sheer scale and diversity required to train effective AI systems. The implication is clear: the broader and more varied the dataset, the more capable and versatile the resulting AI model.

Business Use Cases: AI in Action

The practical applications of AI in business are as diverse as they are transformative. Hurbans provided detailed examples, including:

- **AI Chatbots (Claude, Gemini, ChatGPT, Midjourney):** These tools demonstrate AI's ability to automate customer service, provide personalized assistance, and enhance user engagement.
- **Code Generation and AI in Software:** Highlighting AI's role in automating software development processes, making them more efficient and accessible.
- **Retrieval Augmented Generation (RAG):** A crucial concept discussed was RAG's significance in business. By integrating AI with existing databases and documents, RAG enables more intelligent, context-aware responses and solutions, opening unique opportunities for businesses to leverage AI.

AI Concerns for Businesses: Navigating the Pitfalls

Despite the opportunities, AI's integration into business is not without its challenges. Hurbans highlighted key concerns:

- **IP and Copyright Violations:** The risk of unintentionally infringing on intellectual property through AI-generated content is a pressing concern for businesses navigating the legal complexities of AI.
- **Inaccuracies:** The potential for errors in AI-generated content underscores the importance of oversight and the need for systems to ensure accuracy and reliability.

Summary of Key Takeaways

The essence of AI technologies and their application in business was unravelled, highlighting the importance of large language models and the careful consideration required for data diversity and scale. The discussion on AI's business use cases, especially in chatbots and code generation, alongside the significant implications of Retrieval Augmented Generation (RAG), underscored the transformative potential of AI within industries.

Future Implications

For legal professionals and businesses, the insights from this seminar underscore a pivotal moment in adapting to the rapid advancements in AI. The legal considerations surrounding IP, privacy, and the deployment of AI systems call for a proactive stance in navigating the complex regulatory environment. As AI continues to evolve, staying informed and adaptable is crucial for leveraging its benefits while mitigating legal risks.

Next Steps

Seminar attendees are encouraged to take the following steps to integrate the knowledge gained into their practices or operations:

- **Review and Update Legal Frameworks:** Regularly assess and update your organization's legal and compliance frameworks to accommodate the latest in AI advancements and regulatory changes.
- **Develop and Implement AI Policies:** Based on the insights from the seminar, draft or refine AI usage policies that align with your organizational goals, legal requirements, and ethical considerations.
- **Continuous Education:** Engage in ongoing learning and training opportunities to stay ahead of the curve in AI technology and its legal implications.
- **Collaborate and Share Knowledge:** Foster discussions within your professional networks about the challenges and opportunities presented by AI, promoting a collective understanding and approach to navigating its legal landscape.

As we move forward, the dialogue between technology and law will continue to evolve. Embracing the insights and considerations presented in this seminar offers a solid foundation for legal professionals and businesses to navigate the future confidently and responsibly.

Glossary of Terms:

This glossary details some of the terms presented throughout the seminar, aiming to clarify concepts and facilitate a deeper understanding of the content discussed.

A

- **Adaptiveness:** The ability of an AI system to learn from data, improve its performance, and adapt its functions over time without being explicitly programmed to do so.
- **AI (Artificial Intelligence):** A machine-based system that can operate with varying levels of autonomy and adaptiveness, using data and inputs to generate outputs that influence physical or virtual environments.
- **AI System:** A machine-based system designed to operate with varying levels of autonomy, adapting post-deployment to generate outputs, such as predictions or decisions, based on inputs it receives.
- **Autonomy:** The degree to which an AI system can operate without human intervention, making decisions or predictions based on its programming and inputs.

B

- **Bias:** In AI, an unintended prejudice in decision-making, resulting from flawed programming or data inputs that lead to unfair outcomes or discrimination.

C

- **Copyright:** A legal right granted to the creator of original works, allowing them to control use and distribution.
- **Copyright Infringement:** The unauthorized use of copyrighted material without permission from the rights holder, which violates one or more of the copyright owner's exclusive rights.
- **Confidentiality:** The obligation to protect sensitive information from unauthorized access or disclosure.

D

- **Data Protection:** Legal controls and practices designed to safeguard personal information from misuse and ensure privacy.
- **Data Rights:** Legal rights and guidelines governing the collection, use, protection, and sharing of data, especially personal data.
- **Deployer:** An entity that operates or employs an AI system within a specific context or environment.

E

- **EU AI Act:** Proposed legislation by the European Union to regulate artificial intelligence systems, focusing on safety, transparency, and accountability.

F

- **Fair Use:** A legal doctrine that permits limited use of copyrighted material without requiring permission from the rights holders, typically for purposes such as commentary, news reporting, education, and research.

G

- **Generative AI:** AI technologies capable of creating or generating new content, data, or predictions based on training data.
- **General Purpose AI (GPAI):** AI models capable of performing a wide range of tasks across different fields and applications, demonstrating significant generality and versatility.

H

- **High-Risk AI System:** According to the EU AI Act, AI systems that pose significant risks to the health and safety or fundamental rights of persons, subject to stricter regulatory requirements.
- **Human Oversight:** The process of ensuring that AI systems operate under human supervision, enabling human intervention in decisions made by AI.

I

- **IP (Intellectual Property):** Legal rights that result from intellectual activity in the industrial, scientific, literary, and artistic fields.
- **Importer:** An entity that brings AI systems into a market from abroad, making it available for use within a new jurisdiction.

L

- **Large Language Models (LLMs):** AI models designed to understand, generate, or translate human language by analysing large datasets of text.

P

- **Patents:** Legal rights granted to inventors, giving them exclusive rights to their inventions for a limited period in exchange for public disclosure of the invention.
- **Personal Information:** Information relating to an identified or identifiable natural person.
- **Privacy Laws:** Regulations that govern the collection, use, and protection of personal information, ensuring individuals' rights to privacy are respected.
- **Provider:** An entity or individual that develops, creates, or makes available AI systems for use by others.

R

- **Retrieval Augmented Generation (RAG):** An AI approach that combines retrieving information from a database or corpus and generating new content based on that information.
- **Rights in Data:** Legal rights related to the control, use, and distribution of data, especially in contexts where data has been structured or organized in a way that adds value.

S

- **Stakeholder:** An individual, group, or organization that has an interest in or is affected by the deployment and use of AI systems.

T

- **Technical Documentation:** Documentation that provides detailed information about the design, development, deployment, and maintenance of an AI system, required for demonstrating compliance with regulatory standards.

U

- **User:** An individual or entity that interacts with or utilizes an AI system for various purposes.

Additional Resources

The following list compiles recommended reading material, legal documents, and case studies highlighted throughout the seminar.

1. AI Act of the European Union:

- EU AI Act [Full Text](#)
- Description: The proposed regulatory framework aims to ensure the safe and trustworthy development and deployment of AI systems within the EU.

2. Copyright in the Age of Artificial Intelligence:

- [WIPO Magazine - "AI and Copyright"](#)
- Description: An analysis of how copyright law interacts with AI-generated content and the challenges posed by AI in creative processes.

3. Ethics Guidelines for Trustworthy AI:

- [Ethics Guidelines by the High-Level Expert Group on AI](#)
- Description: These guidelines provide a framework for achieving trustworthy AI, emphasizing ethical principles and values.

4. AI and Privacy:

- [Article 29 Data Protection Working Party - Guidelines on Automated individual decision-making and Profiling](#)
- Description: Guidelines addressing the impact of AI on privacy and data protection, including profiling and automated decision-making.

Case Studies

1. Getty Images v. Stability AI:

- Description: A legal case involving copyright infringement allegations against Stability AI for using Getty Images' photographs to train its AI model without authorisation.

2. NYT v. OpenAI:

- Description: This case focuses on the unauthorised use of copyrighted content from The New York Times by OpenAI to train its language models.

Websites Used for Demos by Rishal

- **Common Crawl:** [Common Crawl Website](#)

Description: A non-profit organisation that crawls the web and freely provides its archives and datasets for research, analysis, and machine learning purposes.

- **Project Gutenberg:** [Project Gutenberg](#)

Description: A library of over 60,000 free eBooks that provides a rich source of textual data for training language models and other AI applications.

- **The OpenAI Playground:** [OpenAI Playground](#)

Description: An interactive web interface provided by OpenAI that allows users to experiment with different AI models, including GPT-3, for generating text, translations, and more.

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