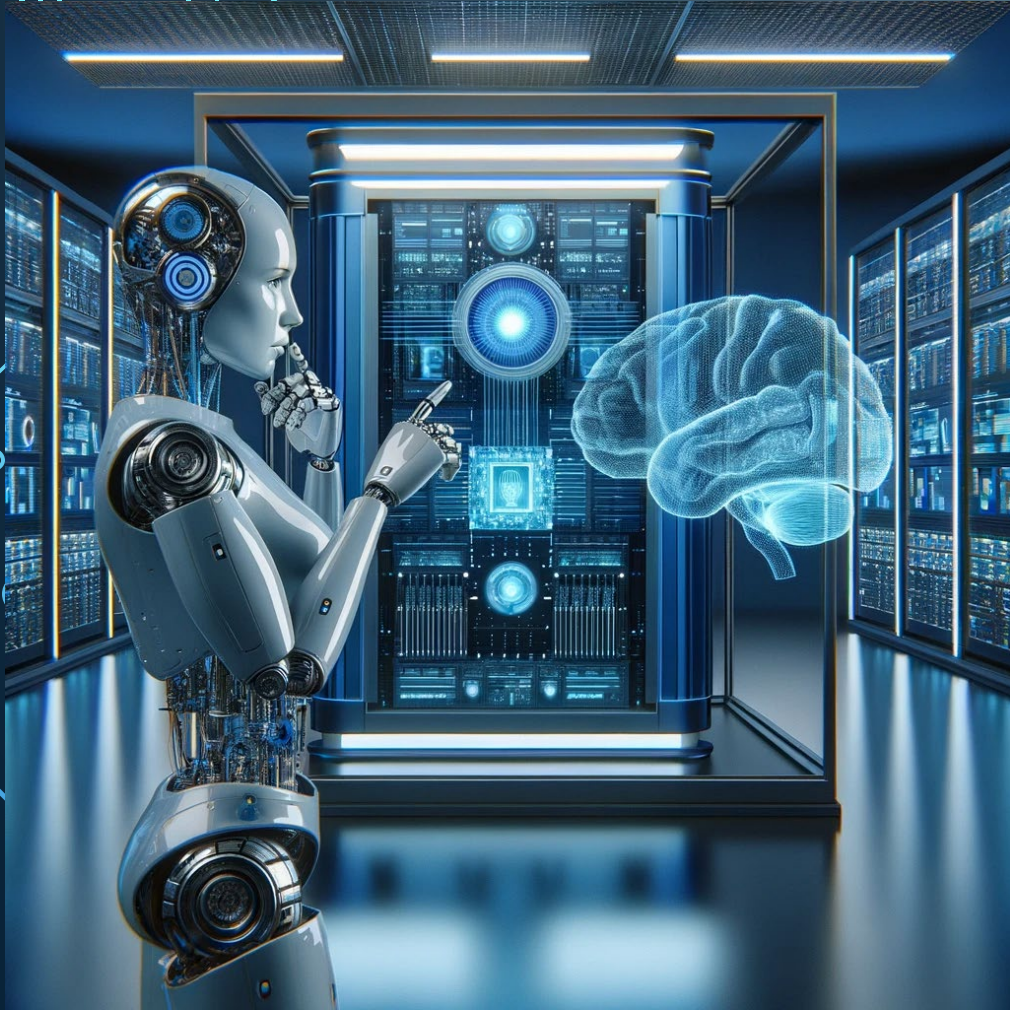


A BRIEF HISTORY OF ARTIFICIAL INTELLIGENCE AND ETHICAL CONSIDERATIONS FOR LAWYERS



**DANIEL A. PIETRAGALLO, CIPP/US
SENIOR ASSISTANT ATTY. GENERAL
COLORADO ATTY. GENERAL'S OFFICE
FINANCIAL FRAUD UNIT**

A NEW ERA

The Age of AI has begun

Artificial intelligence is as revolutionary as mobile phones and the Internet.

By **Bill Gates** | March 21, 2023 • 14 minute read



<https://www.gatesnotes.com/The-Age-of-AI-Has-Begun>

The development of AI is as fundamental as the creation of the microprocessor, the personal computer, the Internet, and the mobile phone. It will change the way people work, learn, travel, get health care, and communicate with each other. Entire industries will reorient around it. Businesses will distinguish themselves by how well they use it.

In my lifetime, I've seen two demonstrations of technology that struck me as revolutionary.



1. The first time was in 1980, when I was introduced to a graphical user interface.

2. The second big surprise came just last year (when Chat GPT scored an “A” on the AP biology exam)...I knew I had just seen the most important advance in technology since the graphical user interface.

<https://www.gatesnotes.com/The-Age-of-AI-Has-Begun>

RAPID ADVANCEMENTS IN AI

Chat GPT 3.5 vs. Chat GPT 4

CHAT GPT-3.5
November 2022

CHAT GPT-4
March 2023

Simulated exams

	GPT-3.5 estimated percentile	GPT-4 estimated percentile
Uniform Bar Exam (MBE+MEE+MPT) ¹	213/400 ~10th	298/400 ~90th
LSAT	149 ~40th	163 ~88th
SAT Evidence-Based Reading & Writing	670/800 ~87th	710/800 ~93rd
SAT Math	590/800 ~70th	700/800 ~89th
Graduate Record Examination (GRE) Quantitative	147/170 ~25th	163/170 ~80th
Graduate Record Examination (GRE) Verbal	154/170 ~63rd	169/170 ~99th
Graduate Record Examination (GRE) Writing	4/6 ~54th	4/6 ~54th

THE REALITY OF AI



ROADMAP FOR DISCUSSION

I. What Is Artificial Intelligence

II. A Brief History of Linguistics and AI

- Turing and Chomsky's Early Contributions
- Moore's Law and The Rise of Big Data
- Deep Blue v. Gary Kasparov
- Watson Wins Jeopardy
- Alpha Go v. Lee Sedol

III. Creating Generative AI

IV. Large Language Models (LLM)

V. Ethical Considerations for Attorneys

VI. The Emergence of AI Governance Law



WHAT IS ARTIFICIAL INTELLIGENCE?

Artificial intelligence is a field of science concerned with building computers and machines that can reason, learn, and act in such a way that would normally require human intelligence or that involves data whose scale exceeds what humans can analyze.

What Is Artificial Intelligence
(AI)? | Google Cloud

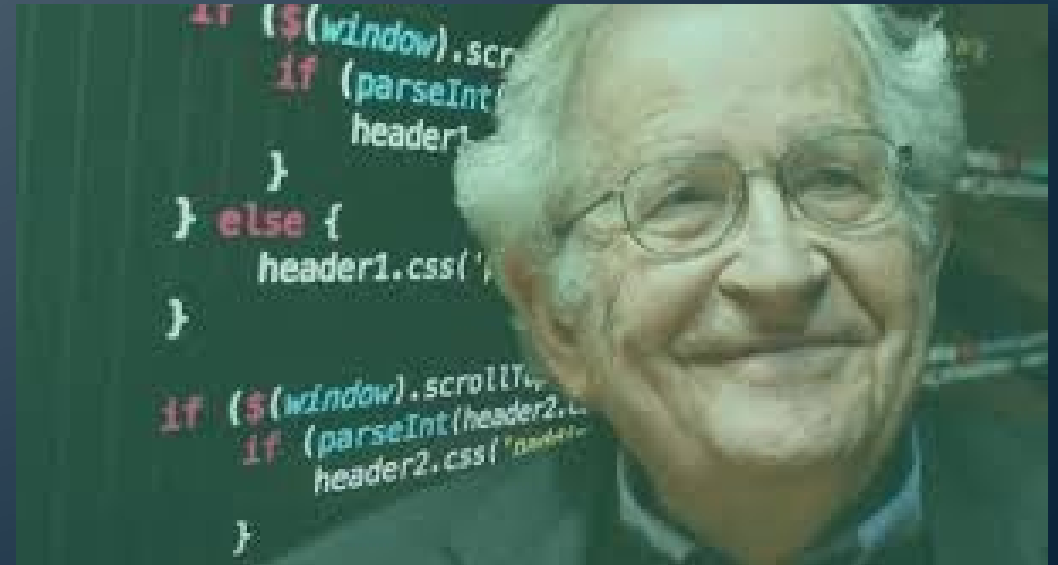
TURING AND CHOMSKY'S EARLY CONTRIBUTIONS

- 1940'S – 1950'S – FOUNDATIONS OF ARTIFICIAL INTELLIGENCE IN ADVANCED MATHEMATICS PIONEERED BY ALAN TURING.
- 1956 DARTMOUTH SUMMER RESEARCH PROJECT ON ARTIFICIAL INTELLIGENCE
 - Marvin Minsky, John McCarthy
 - Led to Research at CMU, MIT, and Stanford
- TURING TEST (AKA THE IMITATION GAME) IS THE MEASURE OF A MACHINE'S ABILITY TO EXHIBIT INTELLIGENCE THAT IS INDISTINGUISHABLE FROM A HUMAN.



TURING AND CHOMSKY'S EARLY CONTRIBUTIONS

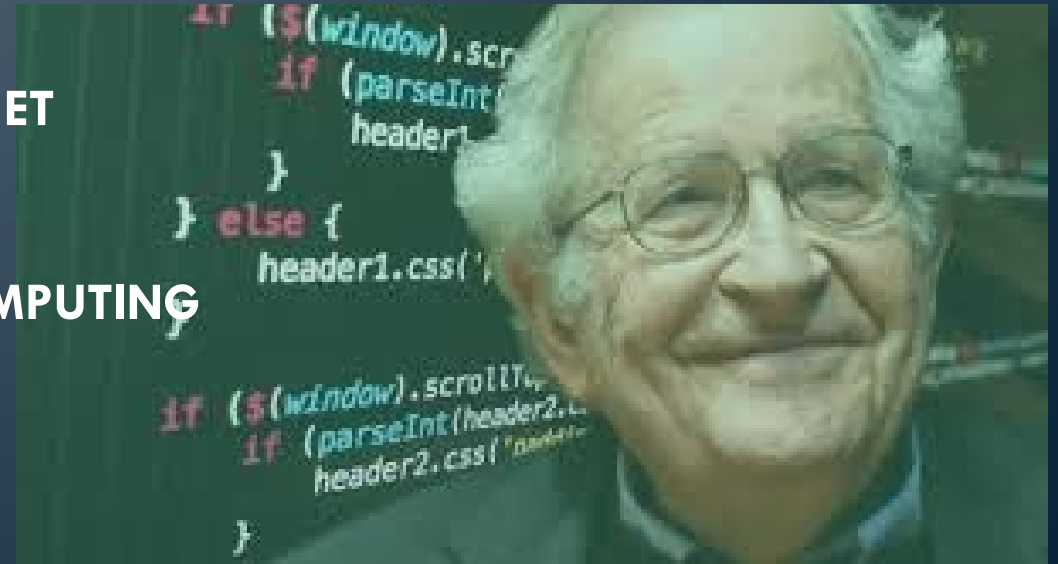
- 1950'S – 1960'S
- MIT PROFESSOR NOAM CHOMSKY IS CONSIDERED THE “FATHER OF MODERN LINGUISTICS”.
- “SYNTACTIC STRUCTURES” WAS PUBLISHED IN 1957 -- PROPOSING THAT GRAMMAR COULD BE TRANSFORMED INTO A MATHEMATICAL SYSTEM WITH PRECISE AND FINITE RULES, WHICH COULD GENERATE INFINITE SENTENCES.
- MIT DEVELOPS ELIZA, A NATURAL LANGUAGE PROCESSING COMPUTER PROGRAM (NLP) – WHICH BECAME THE FIRST CHAT BOT.



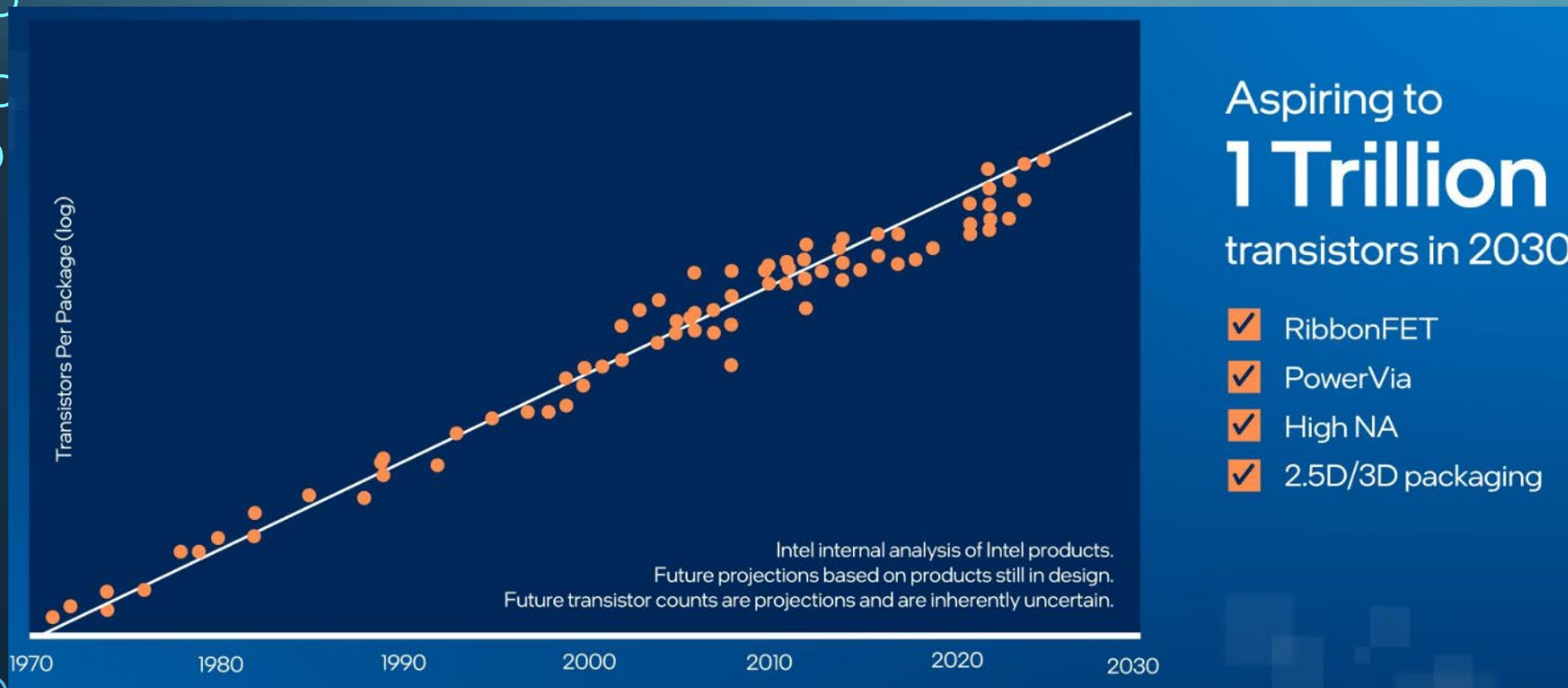
TURING AND CHOMSKY'S EARLY CONTRIBUTIONS

THERE ARE THREE TECHNOLOGICAL ADVANCEMENTS THAT HAVE ENABLED GENERATIVE ARTIFICIAL INTELLIGENCE:

1. THE RISE OF BIG DATA AND THE INTERNET
2. THE RISE OF CLOUD STORAGE AND COMPUTING
3. SIGNIFICANT ADVANCEMENTS IN MICROPROCESSORS AND COMPUTING POWER (MOORE'S LAW)

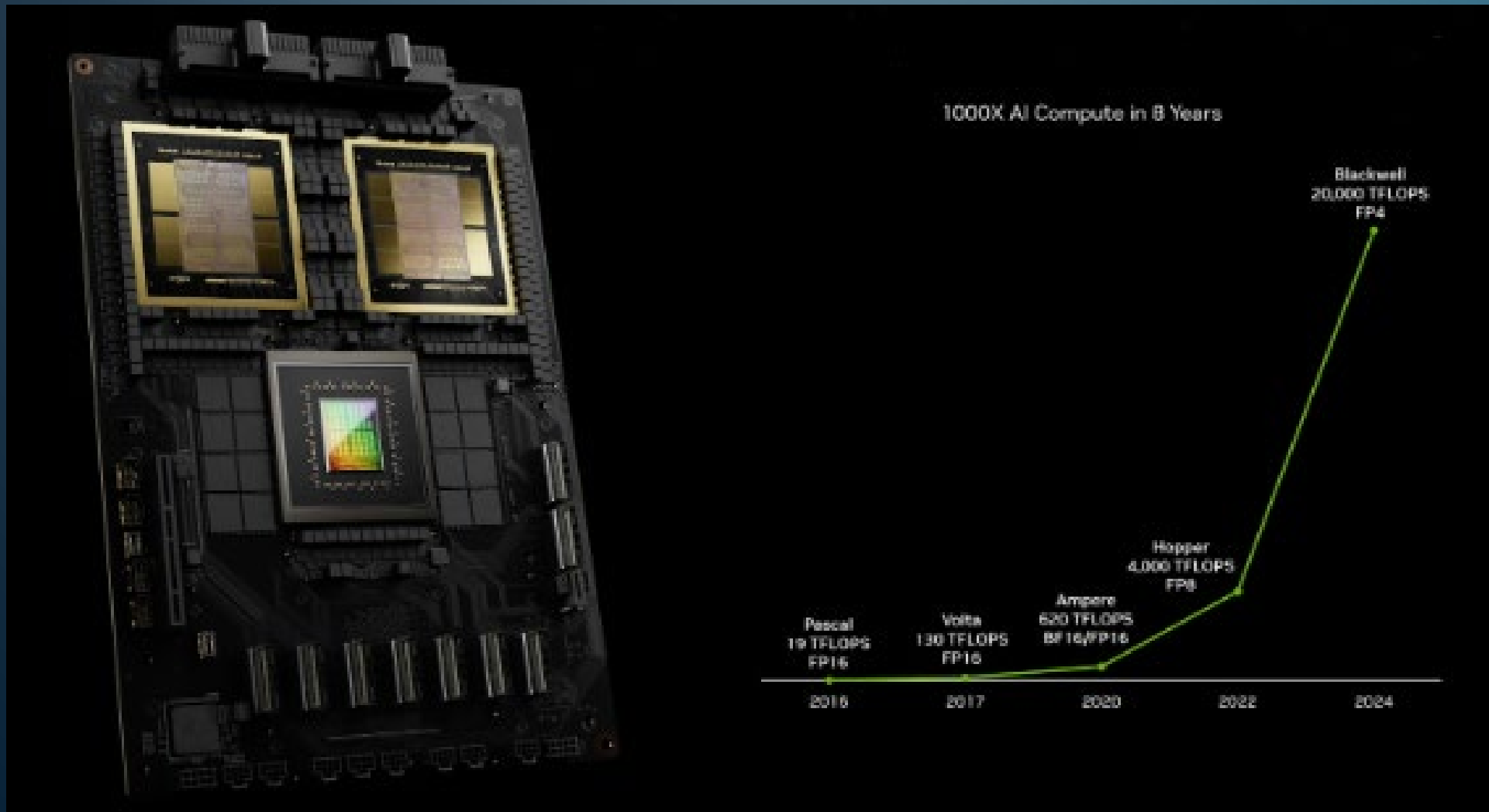


MOORE'S LAW AND THE RISE OF BIG DATA



In 1965, Intel co-founder Gordon Moore predicted that the number of transistors on an integrated chip would double every two years...doubling computing power.

THE RISE OF NVIDIA MOORE'S LAW OR HUANG'S LAW?



QUICK MATH – $350,000 \times \$40,000 =$
\$14 BILLION

This level of demand for Nvidia's chips isn't at all surprising: it's fueled by the market for AI chips. Just one example of many, Meta announced earlier in the year that it aims for 350,000 H100s by the end of the year, which could cost as much as \$40,000 each by some estimations. Though I wonder how Blackwell and

NVIDIA Announces Financial Results for Fourth Quarter and Fiscal 2024

- Record quarterly revenue of **\$22.1 billion, up 22% from Q3, up 265% from year ago**
- Record quarterly Data Center revenue of **\$18.4 billion, up 27% from Q3, up 409% from year ago**
- Record full-year revenue of **\$60.9 billion, up 126%**

MOORE'S LAW AND THE RISE OF BIG DATA

Intel: Moore's law is not dead.

Nvidia: Moore's law is dead.

Who's right? Check the market caps.

— Pedro Domingos (@pmddomingos) [March 5, 2024](#)



Intel Corp

NASDAQ: INTC

131.58 billion



NVIDIA Corp

NASDAQ: NVDA

3.09 trillion

NVIDIA is now worth 23.4x the value of Intel

Gary Kasparov vs. IBM's Deep Blue (1997)



DEEP BLUE WINS 3.5 - 2.5
ONE YEAR EARLIER KASPAROV WON 4-2

WATSON WINS JEOPARDY! (2011)



Grandmaster Lee Sedol vs. Google's Alpha Go (2016)



<https://www.youtube.com/watch?v=WXuK6gekU1Y>

Grandmaster Lee Sedol vs. Google's Alpha Go (2016)



ALPHA GO WINS THE MATCH 4 – 1

<https://www.youtube.com/watch?v=WXuK6gekU1Y>

Defeated by A.I., a Legend in the Board Game Go Warns: Get Ready for What's Next



“I faced the issues of A.I. early, but it will happen for others,” Mr. Lee said recently at a community education fair in Seoul to a crowd of students and parents. “It may not be a happy ending.”

What he worries about is that A.I. may change what humans value.

“People used to be in awe of creativity, originality and innovation,” he said. “But since A.I. came, a lot of that has disappeared.”

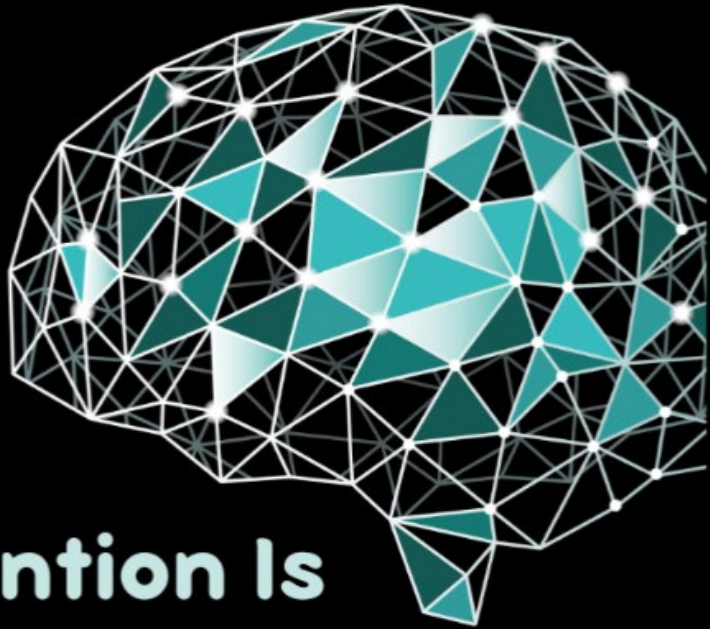
LARGE LANGUAGE MODELS (LLM)

At their core, LLMs are just really good at mimicking human language, in the right context (they know how to respond in the right way). Additionally, they can still violate the principles of language by producing grammatically incorrect sentences (they also can produce nonsensical sentences).

Mohamad Aboufoul, December 5, 2022 – Towards
Data Science

[Despite Their Feats, Large Language Models Still Haven't Contributed to Linguistics | Towards Data Science](#)

"ATTENTION IS ALL YOU NEED" (2017)

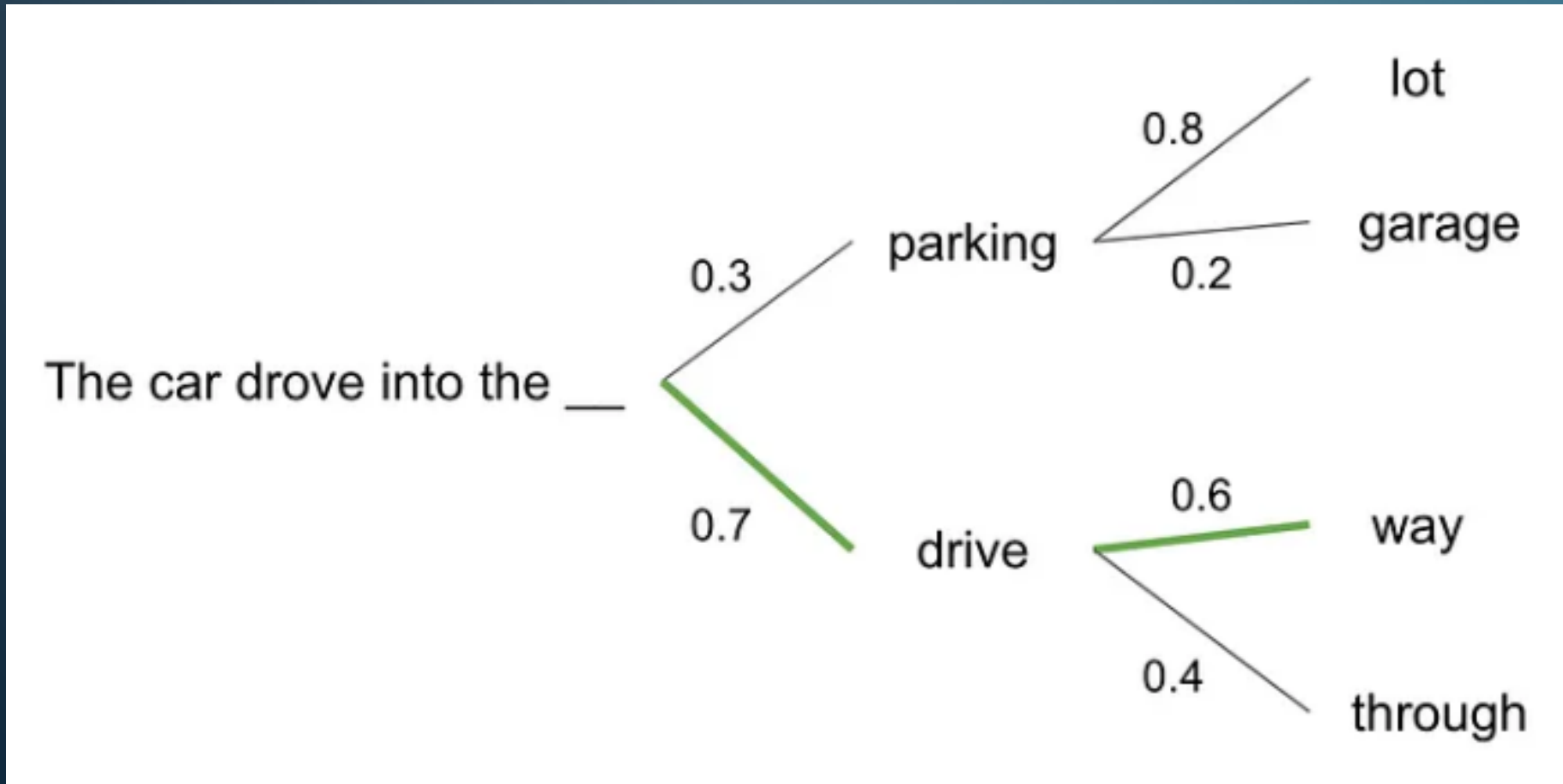


Attention Is All You Need

Revolutionising machine
learning through Transformer
models

- Google Engineers lay out theory of Neural Networks
- Introduced the concept of a Transformer
- Attention mechanism analyzes different parts of the sentence and gives each word a weighted score to determine importance (context).
- "The cat sat on the mat because it was comfortable."

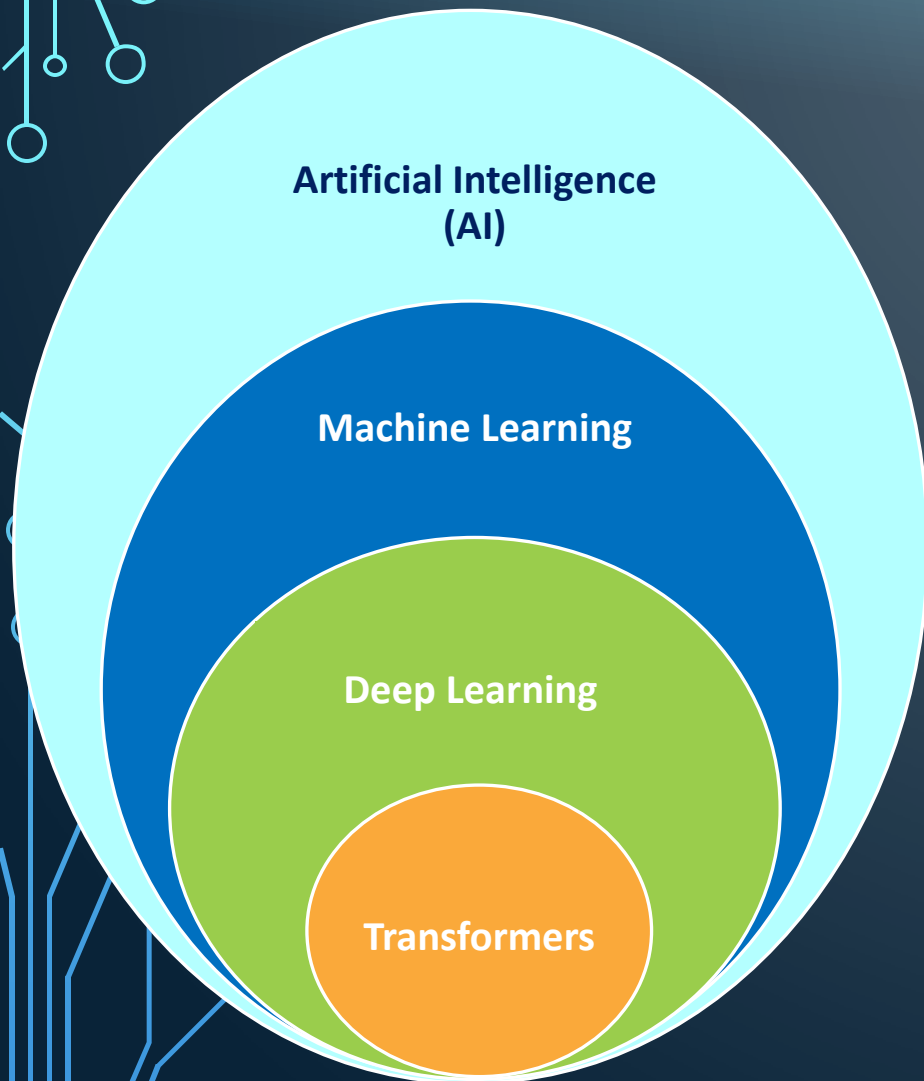
HOW DOES A LLM WORK?



THE GODFATHER OF AI ON PREDICTING NEXT WORD



What is Artificial Intelligence?



Artificial Intelligence (AI)

A computer-based system that uses algorithms to solve problems, make predictions, answer questions, create media, or make automated decisions.

Machine Learning

A subset of AI that enables machines to improve at tasks with experience by detecting patterns from large data sets to make predictions

Examples: Amazon purchase predictions, Netflix video recommendations; spam filters

Deep Learning

A subset of Machine Learning with algorithms that allows the software to train itself to perform tasks using neural networks that mimics how the neurons in a brain works

Example: self-driving cars; facial recognition; speech recognition; robotics

Transformers => Generative AI

A subset of Deep Learning that enables the creation of content (e.g., texts, images, video) by identifying patterns in large quantities of training data and creating new, original material that has similar characteristics using natural language processing

Examples: summarize a document in 12 bullet points; create an itinerary of a trip with teenagers

WHAT IS CHAT GPT?

- GENERATIVE – CREATES OUTPUT THAT GENERATES CONTENT.
- PRETRAINED – LLM IS PRETRAINED WITH TRAINING DATA, INCLUDING BOOKS, NEWSPAPERS, AND WEBSITES.
- TRANSFORMER – USES THE ATTENTION METHOD TO CONVERT INPUT PROMPTS INTO OUTPUT, TRANSFORMING PROMPT INTO CONTENT.

WHAT COULD GO WRONG?
THE CASE OF THE CHAT GPT LAWYER



UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

-----x
ROBERTO MATA,

Plaintiff,

22-cv-1461 (PKC)

-against-

OPINION AND ORDER
ON SANCTIONS

AVIANCA, INC.,

Defendant.
-----x

CASTEL, U.S.D.J.

MATA V. AVIANCA

THE COURT: Did you say, well they gave me part of Varghese, let me look at the full Varghese decision?

MR. SCHWARTZ: I did.

THE COURT: And what did you find when you went to look up the full Varghese decision?

MR. SCHWARTZ: I couldn't find it.

THE COURT: And yet you cited it in the brief to me.

MR. SCHWARTZ: I did, again, operating under the false assumption and disbelief that this website could produce completely fabricated cases. And if I knew that, I obviously never would have submitted these cases.

United States Court of Appeals,
Eleventh Circuit.



Susan Varghese, individually and as personal representative of the
Estate of George Scaria Varghese, deceased,
Plaintiff-Appellant,

v.

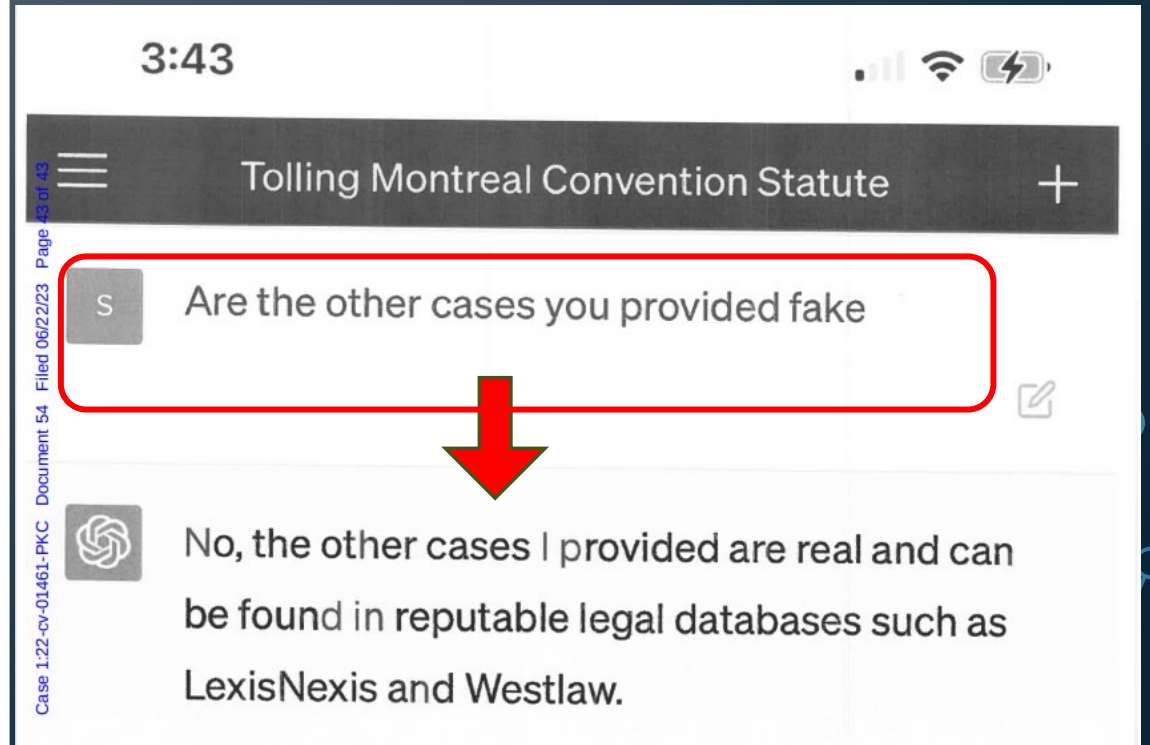
DO NOT CITE OR
QUOTE AS
LEGAL AUTHORITY

China Southern Airlines Co Ltd,
Defendant-Appellee.

No. 18-13694

➤ AI CAN
“HALLUCINATE”

AKA B.S.



-----X
ROBERTO MATA,

Plaintiff,

22-cv-1461 (PKC)

-against-

OPINION AND ORDER
ON SANCTIONS

AVIANCA, INC.,

Defendant.
-----X

CASTEL, U.S.D.J.

MATA V. AVIANCA

- **ChatGPT fabricated Judges for its fake case, some from other circuits**
- **No record of the case with the Clerk of the 11th Circuit**
- **Not an authentic ruling**

25. The “Varghese” decision is presented as being issued by a panel of judges on the United States Court of Appeals for the Eleventh Circuit that consisted of Judges Adalberto Jordan, Robin S. Rosenbaum and Patrick Higginbotham,⁷ with the decision authored by Judge Jordan. (ECF 29-1.) It bears the docket number 18-13694. (Id.) “Varghese” discusses the Montreal Convention’s limitations period and the purported tolling effects of the automatic federal bankruptcy stay, 11 U.S.C. § 362(a). (ECF 29-1.)

26. The Clerk of the United States Court of Appeals for the Eleventh Circuit has confirmed that the decision is not an authentic ruling of the Court and that no party by the name of “Vargese” or “Varghese” has been party to a proceeding in the Court since the

⁷ Judge Higginbotham is a Senior Judge of the United States Court of Appeals for the Fifth Circuit, not the Eleventh Circuit. Judges Jordan and Rosenbaum sit on the Eleventh Circuit.

MATA V. AVIANCA

36. Respondents have now acknowledged that the “Varghese”, “Miller”, “Petersen”, “Shaboon”, “Martinez” and “Durden” decisions were generated by ChatGPT and do not exist. (See, e.g., ECF 32, 32-1.)

AMERICAN BAR ASSOCIATION

STANDING COMMITTEE ON ETHICS AND PROFESSIONAL RESPONSIBILITY

Formal Opinion 512

July 29, 2024

Generative Artificial Intelligence Tools


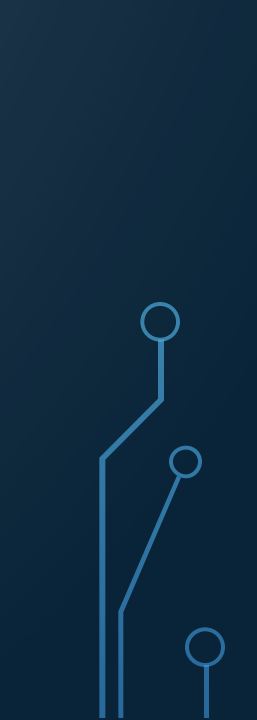
To ensure clients are protected, lawyers using generative artificial intelligence tools must fully consider their applicable ethical obligations, including their duties to provide competent legal representation, to protect client information, to communicate with clients, to supervise their employees and agents, to advance only meritorious claims and contentions, to ensure candor toward the tribunal, and to charge reasonable fees.

While GAI may be used as a springboard or foundation for legal work—for example, by generating an analysis on which a lawyer bases legal advice, or by generating a draft from which a lawyer produces a legal document—lawyers may not abdicate their responsibilities by relying solely on a GAI tool to perform tasks that call for the exercise of professional judgment. For



ABA OPINION 512

GENERATIVE AI TOOLS FOR ATTORNEYS

1. Competence
 2. Confidentiality
 3. Communication
 4. Candor to the Court
 5. Supervisory Responsibilities
 6. Fees
- 
- 

Earlier opinions regarding technological innovations and other innovations in legal practice are instructive when considering a lawyer's use of a GAI tool that requires the disclosure and storage of information relating to the representation.⁵⁴ In particular, opinions developed to address cloud computing and outsourcing of legal and nonlegal services suggest that lawyers should:

- ensure that the [GAI tool] is configured to preserve the confidentiality and security of information, that the obligation is enforceable, and that the lawyer will be notified in the event of a breach or service of process regarding production of client information;⁵⁵
- investigate the [GAI tool's] reliability, security measures, and policies, including limitations on the [the tool's] liability;⁵⁶
- determine whether the [GAI tool] retains information submitted by the lawyer before and after the discontinuation of services or asserts proprietary rights to the information;⁵⁷ and
- understand the risk that [GAI tool servers] are subject to their own failures and may be an attractive target of cyber-attacks.⁵⁸

ABA FORMAL OPINION 512

III. Conclusion

Lawyers using GAI tools have a duty of competence, including maintaining relevant technological competence, which requires an understanding of the evolving nature of GAI. In using GAI tools, lawyers also have other relevant ethical duties, such as those relating to confidentiality, communication with a client, meritorious claims and contentions, candor toward the tribunal, supervisory responsibilities regarding others in the law office using the technology and those outside the law office providing GAI services, and charging reasonable fees. With the

ETHICS RULES IMPLICATED

- **Rule 1.1 – Competent Representation**
- **Rule 1.2 – Scope of Representation**
- **Rule 1.4 – Communication**
- **Rule 1.5 – Reasonable Fees**
- **Rule 1.6 – Confidentiality**

RPC 1.1 – COMPETENCE

- ▶ A lawyer “shall provide competent representation.”
- ▶ Legal knowledge, skill, thoroughness, preparation.
- ▶ “[K]eep abreast of changes in the law and its practice . . . and other relevant technologies.” Cmt. [8].
- ▶ ALWAYS check AI-generated research . . .

RPC 1.6 – CONFIDENTIALITY

- ▶ Shall not reveal information relating to the representation of a client unless authorized.
- ▶ Lawyer “must not reveal” absent informed consent. Cmt. [2].
- ▶ What happens if lawyer provides confidential information into generative AI site? Consent required?
- ▶ AI site is not a closed domain, will use that information to inform future queries.
- ▶ ***Lawyers must review and understand the Terms of Service for AI developers.***

ETHICS RULES IMPLICATED

- **Rule 3.3 – Candor to the Court**
- **Rule 5.1 – Supervising Lawyers**
- **Rule 5.2 – Responsibilities of Subordinate Lawyer**
- **Rule 5.3 – Supervising Nonlawyer Assistants**
- **Rule 8.4 – Misconduct, particularly (c), (d), (g)**



RULE 3.3 – CANDOR TO THE COURT

2. Certification Re: the Use of Artificial Intelligence (AI) for Drafting

In addition to a Certification of Conferral, every motion filed pursuant to Fed. R. Civ. P. 12, Fed. R. Civ. P. 56, and any opposed motion (to include the corresponding response and reply), shall contain a Certification regarding the use, or non-use, of generative artificial intelligence (AI) (such as ChatGPT, Harvey.AI, Google Bard, etc.) in preparing the filing.

The preparer of the filing must certify either that (a) no portion of the filing was drafted by AI, or that (b) any language drafted by AI (even if later edited by a human being) was personally reviewed by the filer or another human being for accuracy using print reporters or traditional legal databases and attesting that the legal citations are to actual existing cases or cited authority. The Court will strike any filing from a party who fails to include this certification in the above-mentioned motions.

RPC 8.4 – MISCONDUCT

- ▶ 8.4(c): Lawyer shall not engage in conduct “involving dishonesty, fraud, deceit[,] or misrepresentation”
 - ▶ Certifying pleading is grounded in law & fact.
 - ▶ MUST a lawyer disclose AI was used?
- ▶ 8.4(d): Lawyer shall not engage in conduct “prejudicial to the administration of justice”
 - ▶ What happens if lawyer files something with hallucinated cites that lawyer fails to identify as such (reasonable review).
- ▶ 8.4(g): Lawyer shall not engage in conduct that exhibits or is intended to appear to or engender bias based on [characteristics] . . .
 - ▶ AI inputs and responses can include racist, sexist, homophobic, other biased content.

People v. Zachariah C. Crabill. 23PDJ067. November 22, 2023.

The Presiding Disciplinary Judge approved the parties' stipulation to discipline and suspended Zachariah C. Crabill (attorney registration number ████████) for one year and one day, with ninety days to be served and the remainder to be stayed upon Crabill's successful completion of a two-year period of probation, with conditions. The suspension took effect November 22, 2023.

Through this conduct, Crabill violated Colo. RPC 1.1 (a lawyer must competently represent a client); Colo. RPC 1.3 (a lawyer must act with reasonable diligence and promptness when representing a client); Colo. RPC 3.3(a)(1) (a lawyer must not knowingly make a false statement of material fact or law to a tribunal); and Colo. RPC 8.4(c) (it is professional misconduct for a lawyer to engage in conduct involving dishonesty, fraud, deceit, or misrepresentation).

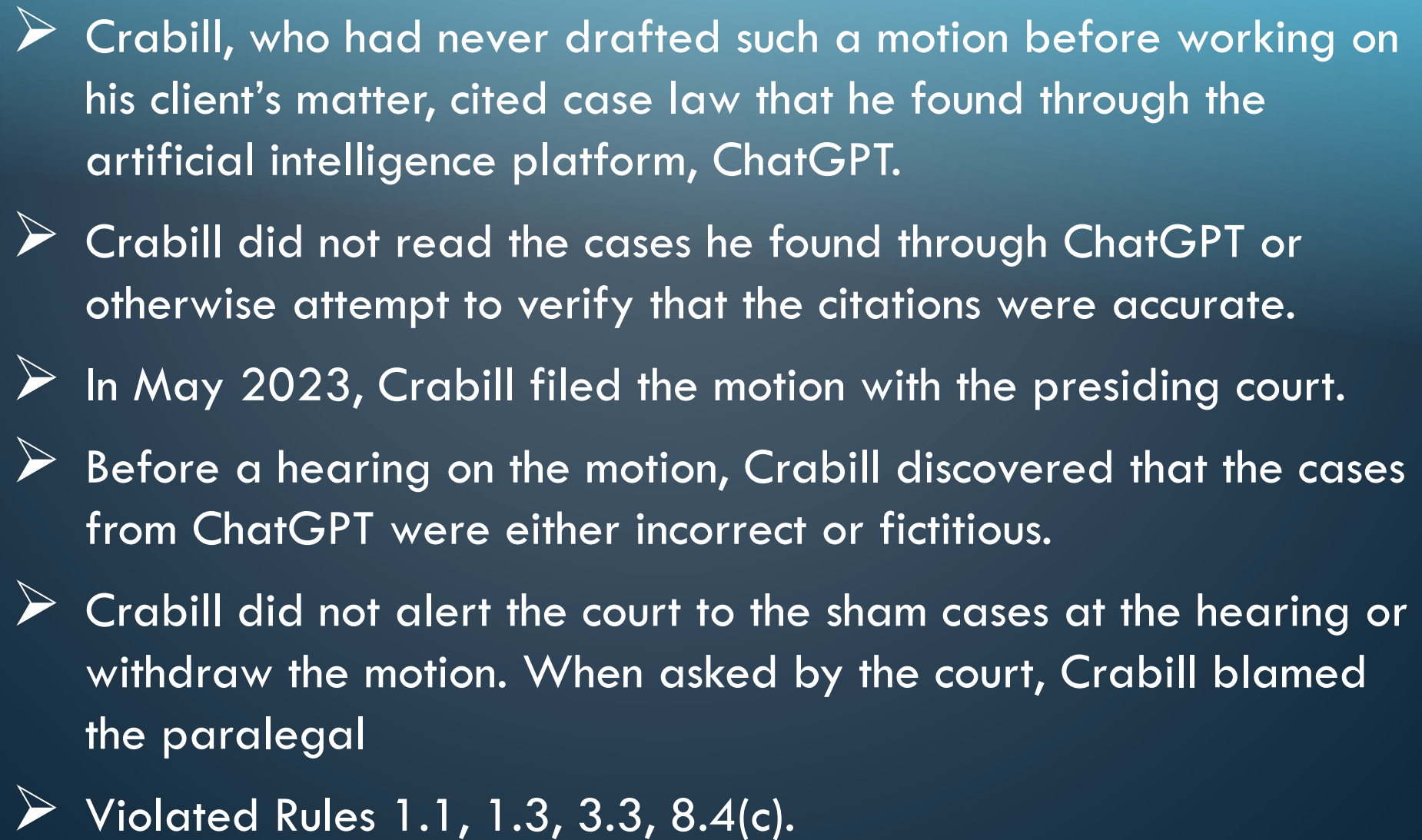
10:02 Respondent: I think all of my case cites from ChatGPT are garbage...I can't even find the cases in Lexis.

10:03 Paralegal: Did you not check them after it gave them to you?

10:03 Respondent: no. like an idiot.

10:12 Paralegal: Are you going to withdraw it?

10:12 Respondent: I have no idea what to do. I am trying to find actual case law in our favor now to present to the judge. I don't have time for this...

- 
- Crabill, who had never drafted such a motion before working on his client's matter, cited case law that he found through the artificial intelligence platform, ChatGPT.
 - Crabill did not read the cases he found through ChatGPT or otherwise attempt to verify that the citations were accurate.
 - In May 2023, Crabill filed the motion with the presiding court.
 - Before a hearing on the motion, Crabill discovered that the cases from ChatGPT were either incorrect or fictitious.
 - Crabill did not alert the court to the sham cases at the hearing or withdraw the motion. When asked by the court, Crabill blamed the paralegal
 - Violated Rules 1.1, 1.3, 3.3, 8.4(c).

Artificial Intelligence and Insurance Fraud: Four Dangers and Four Opportunities

IN BRIEF

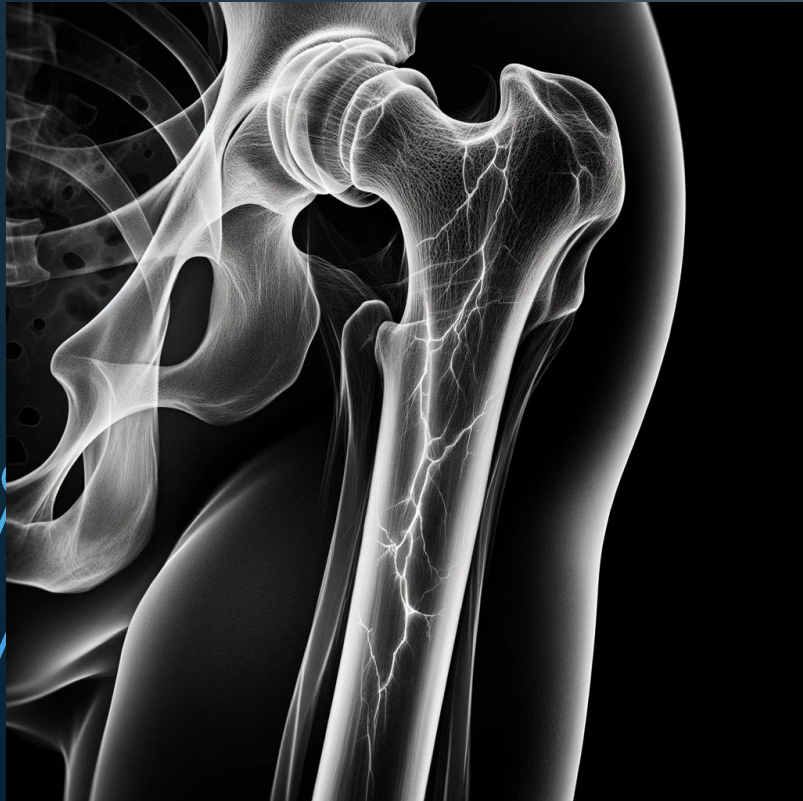
Insurers should monitor the latest AI-assisted hoaxes and learn more about how to harness the power of AI to uncover potential fraud throughout the insurance pipeline.

Impersonation is at the heart of insurance fraud – for example, fake physicians submitting fake medical records to support fake claims. Someone – or something – needs to supply the fake content, and generative artificial intelligence (AI) is more than available to fill the role. AI is fast becoming a criminal's best friend.



Neil Parkin
Head of Business Development,
RGA South Africa

Artificial Intelligence and Insurance Fraud: Four Dangers and Four Opportunities



TOP THREATS FOR THE INSURANCE INDUSTRY

1. VOICE CLONING
2. DEEPPAKE PHOTOS AND VIDEO
3. FABRICATED MEDICAL EVIDENCE
4. PROFESSIONAL DOCUMENTS

TOP USE CASES FOR AI IN CYBERCRIME

According to Resecurity Hunter Unit's assessment, the most promising areas for applying AI in cybercriminal activities include:

- Content generation for malicious and fraudulent purposes, with the goal of optimizing human resources and scaling operations.
- Recognition of specific objects and targets through text processing and document analysis.
- Decision-making and automation of cybercriminal operations.
- Utilizing AI-driven bots for advanced social engineering techniques.
- Analyzing and scoring potential victims, studying their behavior, and detecting patterns for more effective targeting and exploitation.
- Bypass of anti-fraud filters and cybersecurity controls (for e.g. using Deep Fakes and AI-generated artifacts).



ORGANIZED FRAUD RINGS ARE USING AI TOOLS TO IMPROVE FRAUD

Resecurity Uncovers Cybercriminal Faction Known As “GXC Team”

Resecurity has uncovered a cybercriminal faction known as “GXC Team”, who have introduced a new tool that incorporates Artificial Intelligence (AI) for creating fraudulent invoices used for Wire Fraud and Business E-Mail Compromise (BEC).

In this case, the creator of the tool effectively utilized AI for a specialized task – identifying invoices containing payment details. Additionally, the tool is equipped with multilingual support, enabling it to process and understand data in various languages, a crucial feature for handling invoices written in different languages.

Our GXC Service

- Programming any script
- Create any Scampage
- Create any Live Panel
- The best work with GXC Team
- Get you Checker, Validator
- Get any automated function
- Rent you Link + Hosting + Scam + Antibots

+300 BANKS READY:

- FAKE SHOP SYSTEM
- GOV AU
- COMM BANK AU
- JOKERCARD AU
- ONLY1 AU
- ULTIMATE GIFTCARDS AU
- AMAZON AU
- DHL WORDWIDE
- HALIFAX UK
- SUMUP UK
- MYCOUTT UK
- GOV UK
- BINANCE US
- COINBASE
- AIRBNB US
- AMEX US
- OFFICE365

NATIONAL ASSOCIATION OF INSURANCE COMMISSIONERS (NAIC) PRINCIPLES ON AI

- 1. FAIR AND ETHICAL**
- 2. ACCOUNTABLE**
- 3. COMPLIANT**
- 4. TRANSPARENT**
- 5. SECURE, SAFE, AND ROBUST**

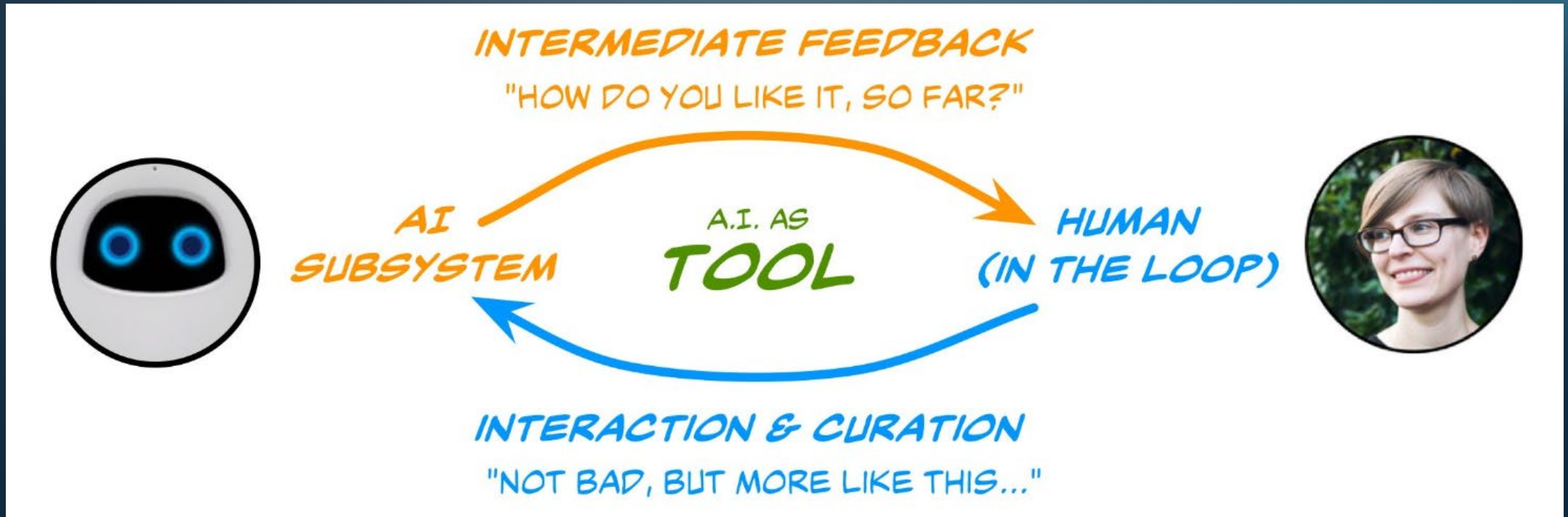
NAIC PRINCIPLES ON AI FAIR AND ETHICAL

- **AI actors should proactively engage in responsible stewardship of trustworthy AI in pursuit of beneficial outcomes for consumers and to avoid proxy discrimination against protected classes.**
- **AI systems should not be designed to harm or deceive people and should be implemented in a manner that avoids harmful or unintended consequences and corrects and remediates for such consequences when they occur.**

NAIC PRINCIPLES ON AI TRANSPARENT

- **AI actors should commit to transparency and responsible disclosures regarding AI systems to relevant stakeholders.**
- **Proactive disclosures include revealing the kind of data being used, the purpose of the data in the AI system and consequences for all stakeholders.**
- **Consistent with Fair Information Privacy Principles**

“HUMAN IN THE LOOP”



<https://hai.stanford.edu/news/humans-loop-design-interactive-ai-systems>

HIGH-RISK AI SYSTEMS – EU AI ACT

- **AI systems are always considered high-risk if it profiles individuals, i.e. automated processing of personal data to assess various aspects of a person's life, such as work performance, economic situation, health, preferences, interests, reliability, behavior, location or movement.**

HIGH-RISK AI SYSTEMS – EU AI ACT

Which AI systems are specifically identified as ‘high risk’?

» Biometrics

Remote biometric identification systems, AI systems used for emotion recognition or biometric categorisation systems inferring sensitive characteristics that are not already prohibited.

- **Why?** Bias and discrimination risks.

» Critical infrastructure

Safety components in critical digital infrastructure, traffic and water, gas, heating and electricity supply.

- **Why?** Malfunctions could jeopardise the lives of many people and lead to significant disruption.

» Education

AI systems used to determine access to education/ training, evaluate progress or identify cheating.

- **Why?** Repeating historical patterns of discrimination in education could affect the course of someone’s life and their earning capacity.

» Employment

AI systems used in recruitment and performance evaluation.

- **Why?** Potential negative impact on career prospects, earning ability and fundamental rights.

HIGH-RISK AI SYSTEMS – EU AI ACT

» Essential public services

AI systems used to evaluate eligibility for public benefits and services and to evaluate, classify and prioritise emergency services.

- **Why?** Potential for significant impacts on people's welfare and infringement of rights. AI systems in emergency contexts could make life and death decisions.

» Law enforcement

Includes AI systems to assess the risks of re-offending, personality characteristics, lie detection and to evaluate evidence.

- **Why?** These systems may involve significant power imbalances and could lead to surveillance, arrest or the discriminatory treatment of certain people.

» Border control

AI systems used to assess people's health or security risk when entering the EU and to examine asylum, visa etc. applications.

- **Why?** Impacts on people in vulnerable situations with potential for discrimination.

» Essential banking and insurance services

AI systems that establish creditworthiness and life and health insurance pricing and risk assessment (excluding fraud detection).

- **Why?** Impacts on access to financial resources and insurance impacts on health and income.

» Administration of justice and democratic processes

AI systems used by courts for researching, interpreting facts and applying the law, as well as to influence electoral outcomes or people's voting behaviour.

- **Why?** These systems could have a potentially significant impact on democracy, the rule of law, individual freedoms and the right to an effective remedy and a fair trial.

HIGH-RISK AI SYSTEMS – EU AI ACT

Requirements for providers of high-risk AI systems (Art. [8-17](#))

High risk AI providers must:

- Establish a **risk management system** throughout the high risk AI system's lifecycle;
- Conduct **data governance**, ensuring that training, validation and testing datasets are relevant, sufficiently representative and, to the best extent possible, free of errors and complete according to the intended purpose.
- Draw up **technical documentation** to demonstrate compliance and provide authorities with the information to assess that compliance.
- Design their high risk AI system for **record-keeping** to enable it to automatically record events relevant for identifying national level risks and substantial modifications throughout the system's lifecycle.
- Provide **instructions for use** to downstream deployers to enable the latter's compliance.
- Design their high risk AI system to allow deployers to implement **human oversight**.
- Design their high risk AI system to achieve appropriate levels of **accuracy, robustness, and cybersecurity**.
- Establish a **quality management system** to ensure compliance.

US State AI Governance Legislation Tracker 2024

STATE LAWS SIGNED TO DATE

Jurisdiction	Legislative process	Statute/bill
Colorado		SB 205
Utah		SB 149
California		AB 2013
		SB 942

ACTIVE BILLS

Jurisdiction	Legislative process	Statute/bill
Illinois		HB 4869
		HB 5116
		HB 5321
		HB 5322
Massachusetts		HD 4788
Ohio		SB 217



https://iapp.org/media/pdf/resource_center/us_state_ai_governance_legislation_tracker.pdf

An Act

SENATE BILL 24-205

CONCERNING CONSUMER PROTECTIONS IN INTERACTIONS WITH ARTIFICIAL INTELLIGENCE SYSTEMS.

Be it enacted by the General Assembly of the State of Colorado:

SECTION 1. In Colorado Revised Statutes, **add** part 17 to article 1 of title 6 as follows:

PART 17
ARTIFICIAL INTELLIGENCE

THE COLORADO AI ACT

- Effective February 1, 2026
- AG has exclusive rulemaking and enforcement authority
- Regulates the Development and Deployment of High-Risk AI Systems
- Similar concepts to EU AI Act
- No Private Right of Action

6-1-1701. Definitions. AS USED IN THIS PART 17, UNLESS THE CONTEXT OTHERWISE REQUIRES:

(3) "CONSEQUENTIAL DECISION" MEANS A DECISION THAT HAS A MATERIAL LEGAL OR SIMILARLY SIGNIFICANT EFFECT ON THE PROVISION OR DENIAL TO ANY CONSUMER OF, OR THE COST OR TERMS OF:

- (a) EDUCATION ENROLLMENT OR AN EDUCATION OPPORTUNITY;
- (b) EMPLOYMENT OR AN EMPLOYMENT OPPORTUNITY;
- (c) A FINANCIAL OR LENDING SERVICE;
- (d) AN ESSENTIAL GOVERNMENT SERVICE;
- (e) HEALTH-CARE SERVICES;
- (f) HOUSING;
- (g) INSURANCE; OR
- (h) A LEGAL SERVICE.

Artificial Intelligence Governance Professional



With the expansion of AI technology, there is a need for professionals in all industries to understand and execute responsible AI governance. The AIGP credential demonstrates that an individual can ensure safety and trust in the development and deployment of ethical AI and ongoing management of AI systems.

[HTTPS://IAPP.ORG/CERTIFY/AIGP/](https://iapp.org/certify/aigp/)

TOP TRENDS TO LOOK FOR IN 2025

1. CALL CENTER AUTOMATION – BOTS ATTACHED TO LLMS WILL BE THE FIRST POINT OF CONTACT FOR MOST CONSUMER CALLS
2. FNOL WILL LIKELY BECOME FULLY AUTOMATED
3. AI WILL IMPROVE RISK ASSESSMENT AND IDENTIFY PATTERNS OF FRAUDULENT BEHAVIOR
4. EMERGING REGULATION WILL FORCE COMPANIES TO MAKE A BUSINESS DECISION ABOUT AI – BECAUSE THE USE OF AI IN CLAIMS WILL BE HEAVILY REGULATED AS “HIGH RISK” SYSTEMS

MOLLICK'S 4 RULES FOR WORKING WITH AI

CO-INTELLIGENCE

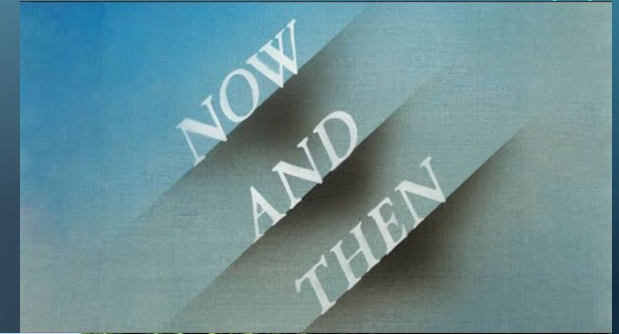
Living and
Working
with
AI

ETHAN MOLLICK

- 1. ALWAYS INVITE AI TO THE TABLE**
- 2. BE THE HUMAN IN THE LOOP**
- 3. TREAT AI LIKE A PERSON**
 - **BUT TELL IT WHAT KIND OF PERSON IT IS**
- 4. ASSUME THIS IS THE WORST AI YOU WILL EVER USE**

THEY GET BY WITH A LITTLE HELP FROM... ARTIFICIAL INTELLIGENCE?

- John Lennon recorded a demo tape for “Now and Then” in 1980, shortly before his death.
- Yoko Ono gave the demo tape to Paul McCartney in 1994, but the audio quality was very poor.
- Director Peter Jackson used an AI program to isolate the sounds of instruments and vocals on the tape, which allowed the song to be mixed in studio.



1. Intro to AI
2. The Role of AI in Insurance
3. Understanding Insurance Fraud
4. AI in Fraud Detection
5. Tools and Technologies
6. Challenges and Limitations
7. Future Trends and Innovations
8. Interactive Session – Q & A



ChatGPT

Creating an effective presentation outline for insurance fraud investigators on the topic of Artificial Intelligence (AI) requires a clear structure that introduces AI concepts, explains their relevance to fraud detection, and offers practical applications. Here's a suggested outline for your presentation:

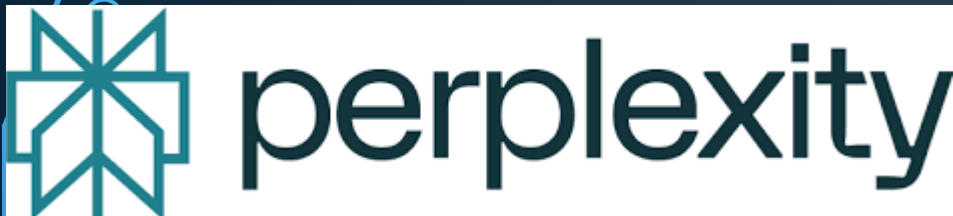
CALL TO ACTION

1. Download one new AI application to your phone and try incorporating it into your daily routine.

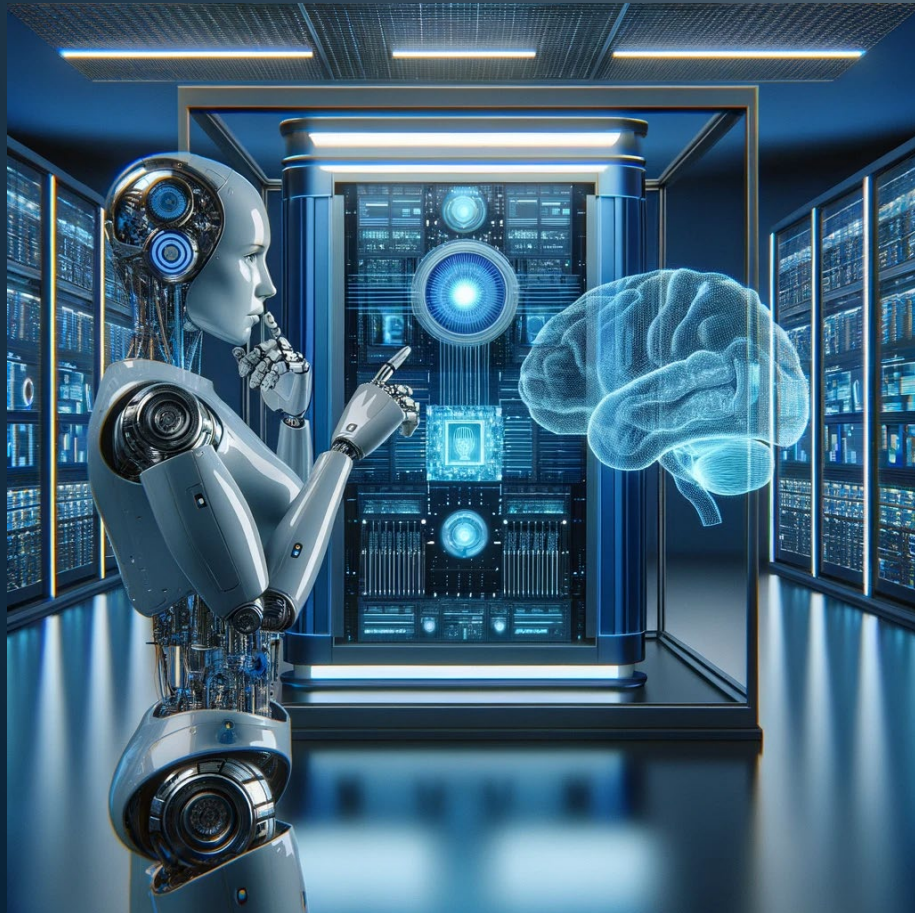


2. Be skeptical but not afraid.

3. Lean into the concept of CO-INTELLIGENCE!



QUESTIONS???



Daniel Pietragallo
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General at Colorado Attorney...



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